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# Catalog of the *Cinara* Species of North America (Homoptera: Aphididae)



David J. Voegtlin  
Charles A. Bridges

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# Catalog of the *Cinara* Species of North America (Homoptera: Aphididae)

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Pictured on the cover are *Cinara edulis* (Wilson) on the trunk of a small *Pinus edulis*. The photograph was taken at Colorado National Monument in May 1986 by David Voegtlin.

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Biology

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## Introduction

Entomologists engaged in taxonomic research require an in-depth knowledge of the literature on the group in question. The ever increasing volume of papers, coupled with the need to know the historical literature on which the taxonomy is based, presents a major hurdle. For many groups of insects this problem has been addressed, in part through the compilation of detailed catalogs. This is not the case for aphids, and there are no catalogs to the extensive taxonomic literature on this important group.

Because of the economic importance and cosmopolitan distribution of aphids, the literature on them is exceptionally diverse in language and publication. Within the last twenty years, bibliographies by Sharma (1969, 1971, 1972, 1977), Smith (1972), and Szelegiewicz (1969) have brought together the majority of publications on the taxonomy of aphids, and these in conjunction with the world list of Eastop and Hille Ris Lambers (1976) are highly useful to the aphidologist. What is lacking is a thorough annotation of these papers so that researchers can quickly identify those that contain information on the species they are studying. Further, the annotations should make clear which forms of the aphid are discussed in a given paper and what other information can be found there. With those needs in mind, we prepared this catalog on the literature of the *Cinara* of North America. The senior author is responsible for the collection and annotation of the literature. The junior author provided the computer expertise and programs used to prepare this catalog.

The information in this catalog is presented in three sections. The first lists the species along with extensive annotations; the second contains over 200 references related to those species; and the third records the hosts of *Cinara* for which documentation can be provided.

### List of Species

Only species that have been recorded in the Nearctic are listed. The arrangement is alphabetical with subspecies (ssp.), synonyms (syn.), and homonyms (hom.) inserted below the presently accepted name. Each species name is followed by the name of the author, the date of the original description, and the genus in which it was described. Five categories of information follow.

**Original Description**, the first category, provides the name of the publication and the pagination for the original description. This information is followed by the citation number assigned to that publication in the bibliography of this catalog.

**Type**, the second category, gives the museum in which the type has been deposited, the form—if it was designated, the publication and pagination for this information, and the citation number assigned to that publication in the bibliography of this catalog.

**References**, the third category, lists the citation number for each reference in this catalog that contains information on a given species beyond distributional or host records. The abbreviations in parentheses following each citation number indicate the forms discussed



and other types of information provided in the publication. References limited to distribution or host records are, however, included in the bibliography and are indicated there by asterisks.

**Distribution**, the fourth category, lists states in the United States and Mexico and provinces in Canada where a given species has been collected. Postal code abbreviations are used for these geographic units. Distributions were determined by using all publications in the bibliography, those with asterisks and those without.

**Hosts**, the last category, includes all known hosts for a given species. Citation numbers are given for each host so that readers who question a host record can verify its source. Including more than two citations for each host seemed redundant. Hosts were compiled from all publications in the bibliography, those with asterisks and those without.

The following abbreviations are used in the List of Species:

fund.	fundatrix
ap. viv.	apterous viviparous female
al. viv.	alate viviparous female
ovip.	ovipara
ap. male	apterous male
al. male	alate male
b	biological note
cp	color plate
k	species given in a key
ld	line drawing (whole or part)
n	general note
n. syn.	synonymy created in this reference
p	photograph

The abbreviations used for museums and collections are given below:

BM(NH)	British Museum (Natural History), London
Boudreaux	Boudreaux Collection, Baton Rouge, Louisiana
CNC	Canadian National Collection, Ottawa
CSU	Colorado State University, Ft. Collins, Colorado
EML	Entomological Museum, Zoological Institute, Lund, Sweden
INHS	Illinois Natural History Survey, Champaign, Illinois
ISV	Instituto de Sanidad Vegetal, Buenos Aires, Brazil
MAES	Maine Agricultural Experiment Station, Orono, Maine
UCB	University of California, Berkeley, California
UMN	University of Minnesota, St. Paul, Minnesota
USNM	United States National Museum, Beltsville, Maryland

## Bibliography

The bibliography primarily contains literature written by North American authors or by authors of papers dealing with Nearctic aphids. Since many of the species in the genus *Cinara* found in the Nearctic are not native, a number of references based predominately on Palearctic aphids are included. Citations are listed alphabetically and numbered in sequence. Those numbers are used in the species list to direct readers to the appropriate citations in the bibliography.

As noted earlier, many papers in the literature on aphids are made up almost entirely of lists of species found in particular geographic areas and do not contain enough information



to justify including them under the reference headings in the species list. They are, however, included in the bibliography and indicated by asterisks. Following each of these citations is a list of the species mentioned in the paper.

### List of Hosts

This list provides the names of the host plants of *Cinara*. The species of *Cinara* that have been found on each are also given. Host names not found in the *Index Kewensis* are not included. Host authors were checked in L.H. Bailey's *Manual of Cultivated Plants* (1949) and in J.C. Willis's *A Dictionary of the Flowering Plants and Ferns* (1973).

### Acknowledgments

We wish to thank Dr. G.A. Robinson, University of Manitoba, Winnipeg, and Dr. J.T. Sorensen, California Department of Agriculture, Sacramento, for reviewing the manuscript of this catalog. We are particularly indebted to Audrey Hodgins, editor at the Illinois Natural History Survey, for her meticulous examination of this catalog for inconsistencies. It is much improved by her efforts.

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- Szelegiewicz, H. 1969. *Mszyce: szkodniki roślin wektory chorób wirusowych i producenci spadzi; Bibliografia*. Państwowe Wydawnictwo Rolnicze Leśne, Warszawa. 250 p.
- Willis, J.C. 1973. *A dictionary of the flowering plants and ferns*, 8th ed. Cambridge University Press, Cambridge. 1245 p.



## List of Species

*abieticola* (Cholodkovsky) 1899; see *confinis* (Koch) 1856

*abietis* (Fitch) 1851; *Lachnus*

ORIGINAL DESCRIPTION: Annu. Rep. N.Y. State Cab. Natur. Hist. 4:67 (49)

TYPE: USNM Rep. N.Y. State Mus. Natur. Hist. 46:411 (188)

REFERENCES: 35 (n); 36 (b); 49 (ap. viv.); 197 (ap. viv.)

DISTRIBUTION: United States: CA, IL, MN, NJ, NY, PA

HOSTS: *Abies concolor* (35, 36); *Picea mariana* (197)

*acadiana* Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:63–64 (87)

TYPE: CNC (ap. viv. original designation) Proc. Biol. Soc. Wash. 69:64 (87)

REFERENCES: 87 (ap. viv.); 111 (k, ld)

DISTRIBUTION: Canada: NB

HOSTS: *Picea glauca* (87, 110)

*alacra* Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:205–206 (119)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:206 (119)

REFERENCES: 108 (k, ld); 119 (ap. viv., ld)

DISTRIBUTION: United States: CA, NV

HOSTS: *Abies concolor* (108, 119)

*alaskana* Hottes 1964; *Cinara*

ORIGINAL DESCRIPTION: Entomol. Ber. 24:50–51 (115)

TYPE: USNM (ap. viv. original designation) Entomol. Ber. 24:51 (115)

REFERENCES: 115 (ap. viv, ld)

DISTRIBUTION: United States: AK

HOSTS: *Picea* sp. (115)

*alticola* Hottes & Essig 1954; see *osborni* Knowlton 1942

*americana* Hottes & Essig 1953; see *arizonica* (Wilson) 1919

*anzai* Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:169–170 (118)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 66:170 (118)

REFERENCES: 89 (ap. viv., ovip., al. male); 90 (ap. viv., al. viv., ovip., al. male, ld); 118 (al. viv.); 204 (ap. viv., al. viv., k)

DISTRIBUTION: United States: CA, OR

HOSTS: *Pinus albicaulis* (118, 157)

*apacheca* Hottes & Butler 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:65–66 (117)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 68:66 (117)

REFERENCES: 107 (k, ld); 117 (ap. viv., al. viv.)

DISTRIBUTION: United States: AZ

HOSTS: *Pinus edulis* (117)

**apini** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:31–35 (59)

TYPE: USNM The Thomas Say Foundation 5:23 (175)

REFERENCES: 59 (fund., ap. viv., al. viv., ovip., al. male, ld); 63 (ap. viv., al. viv., b, k, ld); 175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld)

DISTRIBUTION: United States: CO, ID, UT; Canada: PQ

HOSTS: *Pinus banksiana* (185); *Pinus flexilis* (59, 63)**arizonica** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:22 (214)

TYPE: USNM Can. Entomol. 51:22 (214)

REFERENCES: 120 (n); 174 (ap. viv., al. viv., ld); 175 (ap. viv., al. viv., ovip., b, k, ld); 204 (ap. viv., al. viv., b, k, p); 214 (ap. viv., al. viv.)

DISTRIBUTION: United States: AZ, CA, CO, OR; Canada: BC

HOSTS: *Pinus coulteri* (160); *Pinus glabra* (208); *Pinus jeffreyi* (204); *Pinus occidentalis* (204); *Pinus ponderosa* (53, 175); *Pinus sabiniana* (204); *Pinus wallichiana* (208)syn. **americana** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:164–165 (118)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:165 (118)

REFERENCES: 45 (n. syn.); 118 (ap. viv., al. viv.)

DISTRIBUTION: United States: OR

HOSTS: *Pinus ponderosa* (118)syn. **kinoi** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:161–162 (118)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:162 (118)

REFERENCES: 45 (n. syn.); 118 (al. viv., ap. viv.)

DISTRIBUTION: United States: CA

HOSTS: *Pinus ponderosa* (118)syn. **lassenensis** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:162–164 (118)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:163–164 (118)

REFERENCES: 45 (n. syn.); 118 (al. viv.)

DISTRIBUTION: United States: CA

HOSTS: *Pinus ponderosa* (118)syn. **sabinianus** (Swain) 1919; *Lachnus*

ORIGINAL DESCRIPTION: Univ. Calif. Pubs. Entomol. 3:49 (196)

TYPE: UCB Proc. Biol. Soc. Wash. 67:95 (120)

REFERENCES: 120 (n. syn.); 196 (ap. viv., al. viv.)

DISTRIBUTION: United States: CA

HOSTS: *Pinus sabiniana* (196)syn. **serrai** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:159–161 (118)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:161 (118)

REFERENCES: 45 (n. syn.); 118 (ap. viv., al. viv.)

DISTRIBUTION: United States: CA

HOSTS: *Pinus ponderosa* (118)



**ater** (Gillette & Palmer) 1924; see **atra** (Gillette & Palmer) 1924

**atlantica** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:21–22 (214)

TYPE: CSU & USNM (cotypes) Fla. Agr. Exp. Sta. Mono. Ser. 3:15 (182)

REFERENCES: 174 (ap. viv., al. viv., ld); 177 (ap. viv., al. viv.); 179 (b);

182 (ap. viv., al. viv., ovip., al. male, b, ld, p); 214 (ap. viv., al. viv.)

DISTRIBUTION: United States: AL, AR, CT, DE, FL, GA, LA, MA, MS, NC, NY, OH, PA, SC, TN, TX, WV

HOSTS: *Pinus clausa* (182); *Pinus echinata* (182); *Pinus elliottii* (182); *Pinus glabra* (182);

*Pinus pungens* (182); *Pinus resinosa* (182); *Pinus rigida* (182); *Pinus serotina* (182);

*Pinus strobus* (182); *Pinus sylvestris* (182); *Pinus taeda* (179, 182); *Pinus virginiana* (182)

syn. **carolina** Tissot 1932; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 16:3–4 (198)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 16:3 (198)

REFERENCES: 10 (b, k); 15 (b); 48 (ap. viv., b); 69 (b); 182 (n. syn.);

198 (ap. viv., al. viv., b, ld); 199 (b, k, ld); 200 (n)

DISTRIBUTION: United States: DE, FL, LA, MA, MD, NC, NJ, NY, PA, SC, VA; Canada: ON

HOSTS: *Pinus clausa* (199); *Pinus echinata* (69); *Pinus glabra* (8); *Pinus palustris* (199);

*Pinus resinosa* (15, 180); *Pinus rigida* (156, 180); *Pinus taeda* (198, 200);

*Pinus virginiana* (69, 154)

**atra** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:37–39 (59)

TYPE: USNM The Thomas Say Foundation 5:24 (175)

REFERENCES: 10 (misidentification of *canatra* Hottes & Bradley);

63 (ap. viv., al. viv., k, ld; first use of *atra*, an emendation of *ater*); 107 (k, ld);

175 (ap. viv., al. viv., ovip., ap. male, b, k, ld)

DISTRIBUTION: United States: CO, UT

HOSTS: *Pinus edulis* (59, 63); *Pinus monophylla* (142)

syn. **ater** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:37–39 (59)

TYPE: USNM The Thomas Say Foundation 5:24 (175)

REFERENCES: 59 (ap. viv., al. viv., ovip., ap. male, cp)

DISTRIBUTION: United States: CO

HOSTS: *Pinus edulis* (59)

**atripes** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:7–8 (94)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:8 (94)

REFERENCES: 94 (ap. viv., ld); 111 (k, ld)

DISTRIBUTION: United States: ME

HOSTS: *Picea glauca* (94, 111)

**australi** (Ashmead) 1881; *Lachnus*

ORIGINAL DESCRIPTION: Can. Entomol. 13:67–68 (2)

TYPE: none Fla. Agr. Exp. Sta. Mono. Ser. 3:20 (182)

REFERENCES: 2 (b); 182 (declared *nomen dubium*); 199 (n)

DISTRIBUTION: United States: FL

HOSTS: *Pinus* sp. (2)

**azteca** Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:155–156 (121)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 67:156 (121)

REFERENCES: 121 (ap. viv., al. viv., ld)

DISTRIBUTION: Mexico: MX [?]

HOSTS: *Pinus oocarpa* (121)**banksiana** Pepper & Tissot 1955; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 38:85–88 (181)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 38:87 (181)

REFERENCES: 15 (b); 17 (b, ld); 22 (b); 181 (ap. viv., al. viv., n);

182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p)

DISTRIBUTION: United States: MI, PA, WI; Canada: AB, MB, NB, ON, SK

HOSTS: *Pinus banksiana* (15, 181)**bonica** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:228–229 (91)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 69:229 (91)

REFERENCES: 91 (ap. viv., ld); 111 (k, ld); 115 (n)

DISTRIBUTION: United States: AK

HOSTS: *Picea* sp. (91, 111)**bonita** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:227–228 (91)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 69:228 (91)

REFERENCES: 91 (ap. viv., ld); 111 (k, ld); 115 (n)

DISTRIBUTION: United States: AK

HOSTS: *Picea glauca* (91, 111)**braggii** (Gillette) 1917; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 10:138 (58)

TYPE: USNM The Thomas Say Foundation 5:25 (175)

REFERENCES: 15 (b); 17 (b); 58 (fund., ap. viv., al. viv., ovip., al. male); 111 (k, ld);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 203 (k)

DISTRIBUTION: United States: AK, CO, DE, NJ, OK; Canada: AB, BC, MB, NB, NF, NS, ON, PQ, SK

HOSTS: *Picea abies* (17, 53); *Picea engelmannii* (111); *Picea glauca* (15, 17);*Picea mariana* (15, 17); *Picea pungens* (53, 142); *Picea rubens* (17); *Picea sitchensis* (17, 53)**brevipilosa** Voegtlin, Remaudière, & Peña 1986; *Cinara*

ORIGINAL DESCRIPTION: Proc. Entomol. Soc. Wash. 88(2):233–236 (207)

TYPE: INHS (ap. viv. original designation) Proc. Entomol. Soc. Wash. 88(2):236 (207)

REFERENCES: 207 (ap. viv., ld, p)

DISTRIBUTION: Mexico: MICH

HOSTS: *Pinus* sp. (207)**brevispinosa** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:27–30 (59)

TYPE: USNM The Thomas Say Foundation 5:26 (175)

REFERENCES: 17 (b, ld); 59 (fund., ap. viv., al. viv., ovip., al. male, ld);

63 (ap. viv., al. viv., b, k, ld); 97 (ld); 133 (n); 143 (n);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 204 (ap. viv., k)

DISTRIBUTION: United States: CA, CO, ID, OR, UT; Canada: AB, BC, NB  
HOSTS: *Pinus banksiana* (31); *Pinus contorta* (59, 143); *Pinus contorta* var. *latifolia* (17, 53);  
*Pinus contorta* var. *murrayana* (63, 175)

***burrilli*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:42–43 (215)  
TYPE: UMN (cotypes) Ann. Entomol. Soc. Amer. 75(1):75 (34)  
REFERENCES: 73 (n, b); 133 (b); 175 (ap. viv., al. viv., b, k, ld); 215 (ap. viv., al. viv.)  
DISTRIBUTION: United States: CO, ID, UT  
HOSTS: *Juniperus osteosperma* (133, 142); *Juniperus scopulorum* (175, 215)

***caliente*** Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:197–203 (85)  
TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 68:199 (85)  
REFERENCES: 85 (ap. viv., al. viv., ovip., al. male, ld); 107 (k, ld)  
DISTRIBUTION: United States: AZ, CA, CO  
HOSTS: *Pinus edulis* (85, 107)

***californica*** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:166–167 (118)  
TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:167 (118)  
REFERENCES: 118 (ap. viv., al. viv.); 204 (ap. viv., k)  
DISTRIBUTION: United States: CA  
HOSTS: *Pinus douglasiana* (208); *Pinus durangensis* (208); *Pinus glabra* (208);  
*Pinus lumholzii* (208); *Pinus nigra* (208); *Pinus occidentalis* (208); *Pinus oocarpa* (208)  
*Pinus patula* (208); *Pinus roxburghii* (208); *Pinus tabulaeformis* (118)

***caliginosa*** Hottes 1961; see *coloradensis* (Gillette) 1917

***canadensis*** Hottes & Bradley 1953; see *cupressi* (Buckton) 1881

***canatra*** Hottes & Bradley 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:85–86 (116)  
TYPE: CNC (al. viv. original designation) Proc. Biol. Soc. Wash. 66:86 (116)  
REFERENCES: 10 (b, k, as *atra* (Gillette & Palmer)); 15 (b); 17 (b, ld); 20 (b);  
116 (al. viv., ap. viv., ovip.); 182 (ap. viv., al. viv., ovip., b, k, ld, p)  
DISTRIBUTION: United States: DE, MI, PA; Canada: AB, BC, MB, NB, ON, SK  
HOSTS: *Pinus banksiana* (15, 116); *Pinus contorta* var. *latifolia* (17)

***carolina*** Tissot 1932; see *atlantica* (Wilson) 1919

***caudelli*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:43–44 (215)  
TYPE: USNM Can. Entomol. 51:43 (215)  
REFERENCES: 111 (k, ld); 174 (ap. viv., al. viv., ld); 215 (ap. viv., al. viv.)  
DISTRIBUTION: Canada: BC  
HOSTS: *Picea* sp. (111, 215)

***chamberlini*** Knowlton 1935; *Cinara*

ORIGINAL DESCRIPTION: Pan-Pac. Entomol. 11:141–142 (136)  
TYPE: USNM [?]  
REFERENCES: 136 (ap. viv., al. viv., ld)  
DISTRIBUTION: United States: OR, WA  
HOSTS: *Pinus monticola* (136)

***chinookiana*** Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:67–69 (83)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 68:67–69 (83)

REFERENCES: 17 (b); 83 (ap. viv.); 93 (ovip., ap. male, ld); 108 (k, ld)

DISTRIBUTION: United States: OR, UT, WA; Canada: AB

HOSTS: *Abies lasiocarpa* (83, 93)***cognita*** Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:153–155 (121)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 67:155 (121)

REFERENCES: 83 (al. viv.); 121 (ap. viv., ld)

DISTRIBUTION: United States: CA

HOSTS: *Juniperus communis* (83)***coloradensis*** (Gillette) 1917; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 10:133–134 (58)

TYPE: USNM The Thomas Say Foundation 5:27 (175)

REFERENCES: 10 (b, k); 15 (b); 17 (b); 58 (fund., ap. viv., al. viv., ovip., al. male, b); 63 (ap. viv., al. viv., b, k, ld); 111 (k, ld); 133 (ap. viv., al. viv., b, ld); 175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld)

DISTRIBUTION: United States: AK, CA, CO, ID, UT; Canada: AB, BC, MB, NB, NS, ON, PQ, SK, UT

HOSTS: *Picea engelmannii* (63, 111); *Picea glauca* (15, 17); *Picea pungens* (63, 111);*Picea sitchensis* (53, 178)**syn. *caliginosa*** Hottes 1961; *Cinara*

ORIGINAL DESCRIPTION: Great Basin Nat. 21:17–19 (109)

TYPE: USNM (ap. viv. original designation) Great Basin Nat. 21:19 (109)

REFERENCES: 45 (n. syn.); 109 (ap. viv., al. viv.); 111 (k, ld); 115 (n)

DISTRIBUTION: United States: AK, CO

HOSTS: *Picea engelmannii* (109, 111); *Picea pungens* (109)***commatula*** Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:152–153 (121)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 67:153 (121)

REFERENCES: 114 (k, ld); 121 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: CA

HOSTS: *Pseudotsuga menziesii* (114, 121)***confinis*** (Koch) 1856; *Lachnus*

ORIGINAL DESCRIPTION: Die Pflanzenläuse Aphiden:245 (144)

TYPE: none Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):123 (43)

REFERENCES: 144 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: UT; Canada: BC

HOSTS: *Abies grandis* (53); *Abies lasiocarpa* (53, 142)**syn. *abieticola*** (Cholodkovsky) 1899; *Lachnus*

ORIGINAL DESCRIPTION: Zool. Anz. 22:470–471 (33)

TYPE: unknown Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):123 (43)

REFERENCES: 15 (b); 17 (b); 33 (ap. viv., ld); 43 (b, k, ld); 45 (n. syn.); 108 (k, ld); 120 (ld, n); 204 (ap. viv., k)

DISTRIBUTION: United States: CA; Canada: AB, BC, MB, NB, NF, NS, ON, PQ, SK



HOSTS: *Abies balsamea* (43, 108); *Abies concolor* (17); *Abies grandis* (17, 54);  
*Abies lasiocarpa* (17, 54); *Cedrus* sp. (108); *Picea* sp. (108, 120)

syn. *lasiocarpae* (Gillette & Palmer) 1930; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 22:543 (62)

TYPE: USNM (ap. viv. lectotype [?]) Ann. Entomol. Soc. Amer. 22:543 (62)

REFERENCES: 62 (fund., ap. viv., ld); 63 (ap. viv., k, ld); 71 (ovip.); 82 (al. viv.);  
83 (al. male); 175 (fund., ap. viv., ovip., b, k, ld)

DISTRIBUTION: United States: CO, UT; Canada: BC, NB, NF, ON, PQ, SK

HOSTS: *Abies balsamea* (9, 162); *Abies lasiocarpa* (62, 71)

syn. *vanduzeei* (Swain) 1919; *Lachnus*

ORIGINAL DESCRIPTION: Univ. Calif. Pub. Entomol. 3:50–51 (196)

TYPE: UCB Univ. Calif. Pub. Entomol. 3:51 (196)

REFERENCES: 45 (n. syn.); 196 (ap. viv., al. viv., k, ld)

DISTRIBUTION: United States: CA

HOSTS: *Picea* sp. (196)

*contortae* Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:75–76 (97)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:76 (97)

REFERENCES: 97 (ap. viv., ld); 204 (ap. viv., k)

DISTRIBUTION: United States: CA

HOSTS: *Pinus contorta* (97)

*costata* (Zetterstedt) 1828; *Aphis*

ORIGINAL DESCRIPTION: Fauna Insectorum Lapponica 1:559 (220)

TYPE: EML Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):134 (43)

REFERENCES: 5 (ap. viv., b, k, ld); 17 (b); 43 (b, k, ld); 111 (k, ld); 118 (n);  
184 (ap. viv, b, k, ld)

DISTRIBUTION: United States: CA, PA, WA; Canada: BC, ON

HOSTS: *Picea abies* (43, 111); *Picea glauca* (53); *Picea pungens* (53); *Picea sitchensis* (118)

hom. *costatus* (Hartig) 1839; *Lachnus*

ORIGINAL DESCRIPTION: Entomol. Notizen 1(4):640–646 (67)

REFERENCES: 82 (homonym and synonym of *costata* (Zetterstedt))

*cronartii* Tissot & Pepper 1967; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 50:1–10 (202)

TYPE: USNM (al. viv.) Fla. Entomol. 50:6 (202)

REFERENCES: 182 (ap. viv., al. viv., b, k, ld, p); 202 (ap. viv., al. viv., b, ld)

DISTRIBUTION: United States: FL, GA, MI, MS, SC, VA

HOSTS: *Pinus banksiana* (182); *Pinus clausa* (202); *Pinus elliottii* (182, 202);  
*Pinus serotina* (182); *Pinus taeda* (182, 202)

*cupressi* (Buckton) 1881; *Lachnus*

ORIGINAL DESCRIPTION: Ray Society Monograph 3:46 (30)

TYPE: BM(NH) Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):136 (43)

REFERENCES: 5 (ap. viv., b, k, ld); 30 (ap. viv., al. viv., cp); 43 (ap. viv., al. viv., b, k, ld);  
118 (n)

DISTRIBUTION: United States: CA, NJ, NY, PA, UT; Canada: BC

HOSTS: *Cupressus macrocarpa* (118); *Juniperus chinensis* (43); *Juniperus scopulorum* (43, 155);  
*Juniperus virginiana* (43); *Thuja* sp. (142)

syn. *canadensis* Hottes & Bradley 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:86–87 (116)

TYPE: CNC (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:87 (116)

REFERENCES: 17 (b); 20 (n); 45 (n. syn.); 116 (ap. viv.)

DISTRIBUTION: United States: NY, PA; Canada: ON

HOSTS: *Juniperus virginiana* (116, 180)syn. *sabinae* (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:9–11 (59)

TYPE: USNM Ann. Entomol. Soc. Amer. 17:11 (59)

REFERENCES: 17 (b); 20 (n); 27 (b); 43 (n. syn.);

59 (fund., ap. viv., al. viv., ovip., al. male, ld); 63 (ap. viv., al. viv., b, k, ld);

165 (b); 175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld)

DISTRIBUTION: United States: CO, ID, MI, NY, UT, WY; Canada: BC

HOSTS: *Juniperus scopulorum* (59, 175); *Juniperus virginiana* (187)*curtihirsuta* Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:275–276 (122)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 67:276 (122)

REFERENCES: 93 (ap. viv., ld); 108 (k, ld); 122 (al. viv.);

204 (fund., ap. viv., al. viv., ovip., b, k, p)

DISTRIBUTION: United States: CA, OR

HOSTS: *Abies concolor* (93, 108)*curtivillosa* Hottes 1955; see *villosa* (Gillette & Palmer) 1931*curtiwahtolca* Hottes 1955; see *wahtolca* Hottes 1953*curvipes* (Patch) 1912; *Lachnus*

ORIGINAL DESCRIPTION: Maine Agr. Exp. Sta. Bull. 202:161–163 (176)

TYPE: MAES Proc. Biol. Soc. Wash. 73:223 (108)

REFERENCES: 1 (b, k); 15 (b); 17 (b); 29 (b, p); 63 (ap. viv., al. viv., k, ld); 108 (k, ld);

121 (n); 133 (b); 143 (n); 170 (ap. viv., al. viv., b, ld, p);

175 (ap. viv., al. viv., ovip., b, k, ld); 176 (ap. viv., al. viv., ovip., al. male, ld);

177 (ap. viv., al. viv.); 204 (ap. viv., al. viv., ovip., al. male, b, k, p)

DISTRIBUTION: United States: CA, CO, CT, ID, MA, ME, NY, OR, UT; Canada: AB, BC,

MB, NB, NS, ON, PQ, SK; Mexico: DF

HOSTS: *Abies balsamea* (15, 177); *Abies concolor* (108, 175); *Abies grandis* (65, 108);*Abies lasiocarpa* (36, 63); *Abies magnifica* (157); *Abies religiosa* (170); *Cedrus deodara* (108, 121);*Juniperus* sp. (64); *Picea engelmannii* (108, 143); *Picea glauca* (1)*diabola* Hottes 1961; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 74:95–97 (113)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 74:97 (113)

REFERENCES: 113 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: CA

HOSTS: *Pinus coulteri* (113)*difficilis* Hottes & Frison 1931; see *juniperivora* (Wilson) 1919*dubia* Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:156–157 (121)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 67:157 (121)

REFERENCES: 114 (k, ld); 121 (ap. viv., ld); 204 (ap. viv., k)

DISTRIBUTION: United States: CA, OR

HOSTS: *Pseudotsuga menziesii* (121)

***edulis*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:44–45 (215)

TYPE: UMN (slides from type series) Ann. Entomol. Soc. Amer. 75(1):75 (34)

REFERENCES: 63 (ap. viv., al. viv., k, ld); 107 (k, ld); 133 (ld, n);

171 (fund., ap. viv., al. viv., ovip., al. male, b, ld);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 204 (ap. viv., k);

215 (ap. viv., al. viv.)

DISTRIBUTION: United States: CA, CO, NV, UT

HOSTS: *Pinus edulis* (107, 171); *Pinus monophylla* (107, 133)

***engelmanniensis*** (Gillette & Palmer) 1925; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 18:527–530 (60)

TYPE: USNM The Thomas Say Foundation 5:30 (175)

REFERENCES: 60 (ap. viv., ovip., al. male, cp, ld); 63 (ap. viv., k, ld); 82 (al. viv.);

111 (k, ld); 175 (ap. viv., ovip., al. male, b, k, ld)

DISTRIBUTION: United States: CO, NV, OR, UT

HOSTS: *Abies* sp. (42); *Picea engelmannii* (82, 111)

***engisma*** Hottes & Knowlton 1954; see *obscura* Bradley 1953

***essigi*** Hottes 1961; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 74:1–2 (112)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 74:2 (112)

REFERENCES: 112 (ap. viv., ld)

DISTRIBUTION: United States: CA

HOSTS: *Pinus attenuata* (112)

***ferrisi*** (Swain) 1918; *Lachnus*

ORIGINAL DESCRIPTION: Trans. Am. Entomol. Soc. 44:9–11 (195)

TYPE: UCB (al. viv. lectotype) Proc. Biol. Soc. Wash. 67:98 (120)

REFERENCES: 120 (al. viv., ap. viv., ld); 143 (n); 195 (ap. viv., al. viv., ld); 196 (k, n)

DISTRIBUTION: United States: CA, ID, MN, MT, OR; Canada: BC

HOSTS: *Abies concolor* (195, 196); *Pinus albicaulis* (143); *Pinus monticola* (53, 64)

***flexilis*** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:30 (59)

TYPE: USNM The Thomas Say Foundation 5:30 (175)

REFERENCES: 59 (ap. viv., al. viv., ovip., ld); 63 (ap. viv., al. viv., b, k, ld);

175 (ap. viv., al. viv., ovip., b, k, ld)

DISTRIBUTION: United States: CO

HOSTS: *Pinus flexilis* (59, 63)

***fornacula*** Hottes 1930; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 43:186 (70)

TYPE: UMN (ap. viv. original designation) Proc. Biol. Soc. Wash. 43:186 (70)

REFERENCES: 10 (b, k); 15 (b); 17 (b, ld); 63 (ap. viv.); 70 (ap. viv.);

71 (fund., ovip., al. male); 82 (al. viv.); 111 (k, ld); 115 (n); 175 (ap. viv., b, k)

DISTRIBUTION: United States: AK, CO, DE, ID, IN, MN, NY, OR, PA, UT;  
 Canada: AB, BC, MB, NB, NF, NS, NT, ON, PE, PQ, SK, UT  
 HOSTS: *Picea abies* (153, 180); *Picea engelmannii* (82, 111); *Picea glauca* (15, 115);  
*Picea mariana* (15, 115); *Picea pungens* (71, 175); *Picea rubens* (17); *Picea sitchensis* (53)

*fresai* Blanchard 1939; *Cinara*

ORIGINAL DESCRIPTION: *Physis* 17:860 (6)  
 TYPE: ISV Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):140 (43)  
 REFERENCES: 5 (ap. viv., b, k, ld); 6 (al. viv., ld); 43 (ap. viv., al. viv., b, k)  
 DISTRIBUTION: United States: CA, FL, OR  
 HOSTS: *Cupressus goveniana* var. *pygmaea* (208); *Cupressus macnabiana* (208);  
*Cupressus sempervirens* (160); *Juniperus chinensis* (160); *Juniperus communis* (208);  
*Juniperus horizontalis* (208); *Juniperus monosperma* (208); *Juniperus occidentalis* (160);  
*Juniperus sabina* (208); *Juniperus scopulorum* (43, 160); *Juniperus silicicola* (43);  
*Juniperus squamata* (208); *Juniperus virginiana* (160); *Pinus coulteri* (208)

syn. *maui* Bradley 1965; *Cupressobium*

ORIGINAL DESCRIPTION: Can. Entomol. 97:668–670 (21)  
 TYPE: CNC (ap. viv. original designation) Can. Entomol. 97:670 (21)  
 REFERENCES: 21 (ap. viv., n)  
 DISTRIBUTION: United States: HI  
 HOSTS: *Cryptomeria japonica* (21)

syn. *wacasassae* Tissot 1944; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 27:49–52 (200)  
 TYPE: USNM (al. viv. original designation) Fla. Entomol. 27:51 (200)  
 REFERENCES: 43 (n. syn.); 200 (ap. viv., al. viv., b, ld, n)  
 DISTRIBUTION: United States: FL  
 HOSTS: *Juniperus silicicola* (200)

*gentneri* Hottes 1957; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 70:1–3 (92)  
 TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 70:2 (92)  
 REFERENCES: 92 (ap. viv., ovip., ld); 108 (k, ld)  
 DISTRIBUTION: United States: OR  
 HOSTS: *Abies concolor* (157); *Abies grandis* (92, 108)

*glabra* (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:35–37 (59)  
 TYPE: USNM The Thomas Say Foundation 5:32 (175)  
 REFERENCES: 59 (fund., ap. viv., al. viv., ovip., al. male, ld); 63 (ap. viv., al. viv., b, k, ld);  
 175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld)  
 DISTRIBUTION: United States: CO  
 HOSTS: *Pinus ponderosa* (59); *Pinus ponderosa* var. *scopulorum* (175)

*glacialis* Hottes 1964; *Cinara*

ORIGINAL DESCRIPTION: Entomol. Ber. 24:51–53 (115)  
 TYPE: USNM (ap. viv. original designation) Entomol. Ber. 24:53 (115)  
 REFERENCES: 115 (ap. viv., ld)  
 DISTRIBUTION: United States: AK  
 HOSTS: *Picea sitchensis* (115)



***glehna*** (Essig) 1915; *Lachnus*

ORIGINAL DESCRIPTION: Pom. J. Entomol. Zool. 7:180 (47)

TYPE: UCB Univ. Calif. Pub. Entomol. 3:1–221 (196)

REFERENCES: 47 (ap. viv., al. viv., b, ld); 63 (ap. viv., al. viv., b, k, ld); 111 (k, ld); 133 (ap. viv., b, ld); 143 (n); 196 (k, n)

DISTRIBUTION: United States: AZ, CA, CO, UT; Canada: W. Canada

HOSTS: *Picea engelmannii* (111); *Picea glehnii* (47, 63); *Picea pungens* (133, 143)***gracilis*** (Wilson) 1919; *Lachmiella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:20–21 (214)

TYPE: USNM (al. viv. lectotype) Fla. Agr. Exp. Sta. Mono. Ser. 3:47 (182)

REFERENCES: 22 (b); 174 (ap. viv., al. viv., ld); 177 (ap. viv., al. viv.); 179 (b); 182 (ap. viv., al. viv., ovip., ap. male, b, k, ld, p); 214 (ap. viv., al. viv.)

DISTRIBUTION: United States: CT, DC, DE, NC, OH, PA, SC, VA WV; Canada: MB

HOSTS: *Pinus banksiana* (22); *Pinus taeda* (158, 179); *Pinus virginiana* (174, 214)syn. ***tunicula*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:187–189 (103)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:189 (103)

REFERENCES: 103 (ap. viv., al. viv., ld); 182 (n. syn.)

DISTRIBUTION: United States: DE

HOSTS: *Pinus virginiana* (103)***grande*** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:219–220 (90)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 69:220 (90)

REFERENCES: 90 (ap. viv., ld); 108 (k, ld)

DISTRIBUTION: United States: AZ

HOSTS: *Abies concolor* (90, 108)***harmonia*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:192–195 (104)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 71:195 (104)

REFERENCES: 10 (b, k); 104 (ap. viv., al. viv., ld); 182 (ap. viv., al. viv., ovip., b, k, ld, p)

DISTRIBUTION: United States: DE, ME, MI, OH, PA, WV, WI; Canada: ON, PQ

HOSTS: *Pinus resinosa* (10, 104)***hirsuta*** Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:93–94 (120)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 67:94 (120)

REFERENCES: 120 (ap. viv., ld)

DISTRIBUTION: United States: OR

HOSTS: *Pinus monticola* (120)***hirta*** Hottes & Essig 1953; see ***osborni*** Knowlton 1942***hirticula*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:87–89 (100)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:89 (100)

REFERENCES: 100 (ap. viv., ld)

DISTRIBUTION: United States: WA

HOSTS: *Pinus lambertiana* (100)

*hottesi* (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:22 (59)

TYPE: USNM The Thomas Say Foundation 5:32 (175)

REFERENCES: 10 (b, k); 15 (b); 17 (b); 59 (fund., ap. viv., al. viv., ld);

63 (ap. viv., al. viv., b, k, ld); 83 (ovip., ap. male); 111 (k, ld); 133 (ap. viv., al. viv., b, ld);

143 (n); 175 (fund., ap. viv., al. viv., b, k, ld)

DISTRIBUTION: United States: CO, ID, UT; Canada: AB, BC, MB, NB, NS, ON, PE, PQ, SK

HOSTS: *Picea engelmannii* (83, 111); *Picea glauca* (15, 53); *Picea mariana* (15, 17)*idahoensis* Knowlton 1935; *Cinara*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 28:283–284 (134)

TYPE: lost Proc. Entomol. Soc. Wash. 88(2):233 (207)

REFERENCES: 134 (ap. viv., al. viv., ld); 175 (ap. viv., al. viv., k)

DISTRIBUTION: United States: ID

HOSTS: *Thuja* sp. (134)*inoptis* (Wilson) 1919; see *pinea* (Mordvilko) 1895*inscripta* Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:170–171 (118)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:171 (118)

REFERENCES: 17 (b); 118 (ap. viv.)

DISTRIBUTION: United States: OR; Canada: BC

HOSTS: *Pinus albicaulis* (53, 118)*jucunda* Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:171–172 (102)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:172 (102)

REFERENCES: 102 (ap. viv., ld); 111 (k, ld)

DISTRIBUTION: United States: CO, ND, SD

HOSTS: *Picea glauca* (102)*juniperensis* (Gillette & Palmer) 1925; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 18:526–527 (60)

TYPE: USNM The Thomas Say Foundation 5:33 (175)

REFERENCES: 60 (al. viv., ovip., cp, ld); 63 (al. viv., b, k, ld); 175 (al. viv., ovip., b, k, ld)

DISTRIBUTION: United States: CO, OR

HOSTS: *Juniperus communis* (60, 63)*juniperi* (De Geer) 1773; *Aphis*

ORIGINAL DESCRIPTION: Second Mémoire 3:56 (39)

TYPE: unknown Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):141 (43)

REFERENCES: 5 (ap. viv., b, k, ld); 10 (b, k, as *rubicundus* (Wilson)); 15 (b); 17 (b, ld);

43 (ap. viv., al. viv., b, k); 46 (ap. viv., al. viv., b, ld)

DISTRIBUTION: United States: CA, MN, NY, OR, PA, UT; Canada: AB, BC, MB, ON, PQ, SK

HOSTS: *Calocedrus decurrens* (208); *Cupressus goveniana* var. *pygmaea* (208);*Juniperus chinensis* (140); *Juniperus communis* (10, 15); *Juniperus squamata* (53);*Juniperus virginiana* (180); *Thuja occidentalis* (46)

***juniperivora*** (Wilson) 1919; *Lachnus*

ORIGINAL DESCRIPTION: Entomol. News 30:6–7 (216)

TYPE: UMN (cotypes) Ann. Entomol. Soc. Amer. 75(1):75 (34)

REFERENCES: 84 (n); 177 (al. viv.); 199 (b, k, ld); 200 (n); 216 (al. viv., ld)

DISTRIBUTION: United States: CT, FL, LA, MD

HOSTS: *Juniperus silicicola* (199, 200); *Juniperus virginiana* (177, 216)**syn. *difficilis*** Hottes & Frison 1931; *Cinara*

ORIGINAL DESCRIPTION: Ill. Nat. Hist. Surv. Bull. 19:153–155 (124)

TYPE: INHS (al. viv. original designation) Ill. Nat. Hist. Surv. Bull. 19:155 (124)

REFERENCES: 84 (n. syn.); 124 (ap. viv., al. viv., b, k, ld)

DISTRIBUTION: United States: IL

HOSTS: *Juniperus virginiana* (124)***kinoi*** Hottes & Essig 1953; see *arizonica* (Wilson) 1919***kiusa*** Hottes 1957; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 70:3–4 (92)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 70:4 (92)

REFERENCES: 92 (ap. viv., ld); 108 (k, ld)

DISTRIBUTION: United States: ID, OR

HOSTS: *Abies concolor* (92, 108)***kocheta*** Hottes 1958; see *nigra* (Wilson) 1919***kuchea*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:85–86 (99)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:86 (99)

REFERENCES: 99 (ap. viv., ld)

DISTRIBUTION: United States: ID; Canada: BC

HOSTS: *Pinus monticola* (53, 99)***laricifex*** (Fitch) 1858; *Lachnus*

ORIGINAL DESCRIPTION: Trans. N.Y. Agr. Soc. 17:752 (50)

TYPE: USNM (ap. viv.) Proc. Biol. Soc. Wash. 66:158 (76)

REFERENCES: 10 (b, k, as *laricis* (Hartig)); 15 (b); 17 (b); 50 (ap. viv., b); 76 (ap. viv., b); 167 (ap. viv., b); 197 (ap. viv., b)

DISTRIBUTION: United States: IL, MN, NY; Canada: AB, MB, NB, NF, NS, NT, ON, PQ, SK

HOSTS: *Larix laricina* (10, 15)***laricifoliae*** (Wilson) 1915; *Lachnus*

ORIGINAL DESCRIPTION: Trans. Amer. Entomol. Soc. 41:102 (213)

TYPE: UMN (cotypes) Ann. Entomol. Soc. Amer. 75(1):75 (34)

REFERENCES: 17 (b, ld); 213 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: OR; Canada: BC

HOSTS: *Larix occidentalis* (178, 213)***laricis*** (Hartig) 1839; *Lachnus*

ORIGINAL DESCRIPTION: Entomol. Notizen 1(4):645 (67)

TYPE: BM(NH) (lectotype) Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):146 (43)

REFERENCES: 1 (b, k); 10 (misidentification of *laricifex* (Fitch)); 43 (ap. viv., al. viv., b, k); 124 (n); 177 (ap. viv., al. viv.); 184 (ap. viv., b, k, ld)

DISTRIBUTION: United States: CT, IL, NY, PA; Canada: NS

HOSTS: *Larix laricina* (1, 124)

*lasiocarpae* (Gillette & Palmer) 1930; see *confinis* (Koch) 1856

*lassenensis* Hottes & Essig 1953; see *arizonica* (Wilson) 1919

*longispinosa* Tissot 1932; see *pergandei* (Wilson) 1919

*louisianensis* Boudreaux 1948; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 31:96–98 (7)

TYPE: Boudreaux (al. viv. original designation) Fla. Entomol. 31:98 (7)

REFERENCES: 7 (ap. viv., al. viv., b, ld); 118 (n); 203 (ap. viv., al. viv., k);

207 (ap. viv., al. viv., ld, p)

DISTRIBUTION: United States: CA, LA, OK; Mexico: MEX, DF

HOSTS: *Cupressus* (207); *Thuja orientalis* (118)

*lunata* Hottes 1961; see *melaina* Boudreaux 1948

*lyallii* Bradley 1956; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 88:494–495 (12)

TYPE: CNC (ap. viv. original designation) Can. Entomol. 88:495 (12)

REFERENCES: 12 (ap. viv., ovip., male, ld); 17 (b, ld)

DISTRIBUTION: Canada: AB

HOSTS: *Larix laricina* (12); *Larix lyallii* (17)

*manitobensis* Bradley 1963; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 95:287–290 (19)

TYPE: CNC (ovip. original designation) Can. Entomol. 95:290 (19)

REFERENCES: 19 (ap. viv., al. viv., ovip., ap. male, ld)

DISTRIBUTION: Canada: MB

HOSTS: *Juniperus horizontalis* (19)

*mariana* Bradley 1956; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 88:706 (13)

TYPE: CNC (ap. viv. original designation) Can. Entomol. 88:706 (13)

REFERENCES: 13 (ap. viv., al. viv., ld)

DISTRIBUTION: Canada: SK

HOSTS: *Picea mariana* (13)

*medispinosa* (Gillette & Palmer) 1929; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 22:30 (61)

TYPE: USNM The Thomas Say Foundation 5:35 (175)

REFERENCES: 17 (b); 61 (n); 63 (ap. viv., al. viv., b, k, ld);

133 (fund., ap. viv., al. viv., b, ld); 143 (n);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 204 (ap. viv., k)

DISTRIBUTION: United States: CA, CO, ID, OR, UT; Canada: AB, BC

HOSTS: *Pinus contorta* (133, 143); *Pinus contorta* var. *latifolia* (17, 53);

*Pinus contorta* var. *murrayana* (63, 175)



syn. ***similis*** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:23–26 (59)

TYPE: USNM The Thomas Say Foundation 5:35 (175)

REFERENCES: 59 (fund., ap. viv., al. viv., ovip., al. male, ld); 61 (name preoccupied by *similis* (van der Goot))

DISTRIBUTION: United States: CO

HOSTS: *Pinus contorta* (59)***melaina*** Boudreaux 1948; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 31:98–100 (7)

TYPE: Boudreaux (al. viv. original designation) Fla. Entomol. 31:99 (7)

REFERENCES: 7 (ap. viv., al. viv., b, ld); 48 (ap. viv., b); 179 (b)

DISTRIBUTION: United States: DE, FL, GA, LA, NC, SC

HOSTS: *Pinus elliotii* (8); *Pinus glabra* (7); *Pinus palustris* (7); *Pinus taeda* (7, 48)syn. ***lunata*** Hottes 1961; *Cinara*

ORIGINAL DESCRIPTION: Great Basin Nat. 21:20–22 (110)

TYPE: USNM (ap. viv. original designation) Great Basin Nat. 21:20–22 (110)

REFERENCES: 110 (ap. viv., al. viv., ld); 182 (n. syn.)

DISTRIBUTION: United States: DE

HOSTS: *Pinus virginiana* (110)***metalica*** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:85–87 (88)

TYPE: USNM (ovip. original designation) Proc. Biol. Soc. Wash. 69:86 (88)

REFERENCES: 88 (ovip., al. male); 90 (ovip., male, ld); 107 (ap. viv., k, ld)

DISTRIBUTION: United States: AZ, CO

HOSTS: *Pinus edulis* (107)***minuta*** Hottes & Knowlton 1954; *Cinara*

ORIGINAL DESCRIPTION: Great Basin Nat. 14:11 (125)

TYPE: USNM (ovip. original designation) Great Basin Nat. 14:11 (125)

REFERENCES: 108 (k, ld); 125 (ovip., ld)

DISTRIBUTION: United States: UT

HOSTS: *Abies lasiocarpa* (108, 125)***moketa*** Hottes 1957; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 70:6–7 (92)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 70:7 (92)

REFERENCES: 92 (ap. viv., ld); 204 (ap. viv., al. viv., b, k, p)

DISTRIBUTION: United States: CA

HOSTS: *Pinus lambertiana* (92, 204)***montanensis*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:45–46 (215)

TYPE: UMN (cotype slides) Ann. Entomol. Soc. Amer. 75(1):75 (34)

REFERENCES: 215 (ap. viv., al. viv.)

DISTRIBUTION: United States: MT

HOSTS: *Pinus nigra* (215)

**montanesea** Hottes 1961; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 74:97–100 (113)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 74:100 (113)

REFERENCES: 113 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: CA

HOSTS: *Pinus coulteri* (113)**murrayanae** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:26–27 (59)

TYPE: USNM Ann. Entomol. Soc. Amer. 24:861 (63)

REFERENCES: 17 (b, ld); 59 (fund., ap. viv., al. viv., ovip., al. male); 63 (b, k, ld, n); 143 (n); 175 (ap. viv., al. viv., ovip., male, b, k, ld)

DISTRIBUTION: United States: CA, CO, ID, UT; Canada: BC

HOSTS: *Pinus albicaulis* (152); *Pinus contorta* (63, 143); *Pinus contorta* var. *latifolia* (17, 53)**nepticula** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:63–64 (96)

TYPE: CNC (al. viv. original designation) Proc. Biol. Soc. Wash. 71:64 (96)

REFERENCES: 96 (al. viv., ld); 111 (k, ld)

DISTRIBUTION: Canada: NS

HOSTS: *Picea rubens* (96, 111)**newelli** Tissot 1939; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 22:38–41 (199)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 22:41 (199)

REFERENCES: 182 (ap. viv., al. viv., b, k, ld, p); 199 (ap. viv., al. viv., b, k, ld)

DISTRIBUTION: United States: FL

HOSTS: *Pinus elliotii* (182, 199); *Pinus taeda* (182)**nigra** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:41–42 (215)

TYPE: UMN (ap. viv. lectotype) Fla. Agr. Exp. Sta. Mono. Ser. 3:72–73 (182)

REFERENCES: 182 (ap. viv., al. viv., ovip., ap. male, b, k, ld, p); 215 (ap. viv., al. viv.)

DISTRIBUTION: United States: MI, UT, WI

HOSTS: *Pinus banksiana* (182); *Pinus* sp. (142)syn. **kocheta** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:81–83 (98)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 71:83 (98)

REFERENCES: 98 (al. viv., ld); 182 (n. syn.)

DISTRIBUTION: United States: MI

HOSTS: *Pinus banksiana* (98)**nigripes** Bradley 1962; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 94:1175–1178 (18)

TYPE: CNC (al. viv. original designation) Can. Entomol. 94:1178 (18)

REFERENCES: 18 (fund., ap. viv., al. viv., ovip., ap. male, b, ld)

DISTRIBUTION: United States: AK; Canada: BC, ON

HOSTS: *Picea glauca* (18); *Picea mariana* (18); *Picea sitchensis* (53)

**nigrita** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:208–209 (119)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:209 (119)

REFERENCES: 119 (al. viv., ld)

DISTRIBUTION: United States: AZ

HOSTS: *Pinus ponderosa* (119)**nimbata** Hottes 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:253–256 (82)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 67:256 (82)

REFERENCES: 82 (ap. viv., al. viv., ovip., al. male); 83 (ld); 111 (k, ld); 115 (n)

DISTRIBUTION: United States: AK, CO; Canada: W. Canada

HOSTS: *Picea engelmannii* (82, 111)**nitidula** Hottes 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:256–258 (82)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 67:257 (82)

REFERENCES: 82 (ap. viv., al. viv.); 90 (ovip., ap. male, ld); 107 (k, ld)

DISTRIBUTION: United States: CO, UT

HOSTS: *Pinus edulis* (82, 107)**obscura** Bradley 1953; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 85:431 (11)

TYPE: CNC (al. viv. original designation) Can. Entomol. 85:431 (11)

REFERENCES: 11 (al. viv., ap. viv., ld); 17 (b); 83 (n); 111 (k, ld)

DISTRIBUTION: Canada: AB, BC, NB, NF, NT, SK

HOSTS: *Picea engelmannii* (53); *Picea glauca* (11, 111)syn. **enigma** Hottes & Knowlton 1954; *Cinara*

ORIGINAL DESCRIPTION: Great Basin Nat. 14:11–13 (125)

TYPE: USNM (ap. viv. original designation) Great Basin Nat. 14:13 (125)

REFERENCES: 83 (n. syn.); 125 (ap. viv., ld)

DISTRIBUTION: United States: CO

HOSTS: *Pinus* sp. (125)**occidentalis** (Davidson) 1909; *Lachnus*

ORIGINAL DESCRIPTION: J. Econ. Entomol. 2:300 (35)

TYPE: USNM Ann. Entomol. Soc. Amer. 75(1):77 (34)

REFERENCES: 17 (b, ld); 35 (ap. viv.); 36 (b, n); 63 (ap. viv., al. viv., b, k, ld); 108 (b, k, ld); 133 (b); 143 (n); 171 (fund., ap. viv., al. viv., ovip., al. male, b, ld);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 196 (k, n);

204 (fund., ap. viv., al. viv., ovip., al. male, b, k, p); 211 (fund., al. viv., ovip., al. male)

DISTRIBUTION: United States: AZ, CA, CO, ID, NV, OR, UT; Canada: BC, PQ

HOSTS: *Abies amabilis* (66); *Abies balsamea* (53); *Abies concolor* (175, 196);*Abies grandis* (35, 211); *Abies lasiocarpa* (63, 171); *Abies sibiricae* (52, 53)**onatei** Hottes & Essig 1953; see *ponderosae* (Williams) 1910**ontarioensis** Bradley 1962; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 94:1178–1181 (18)

TYPE: CNC (al. viv. original designation) Can. Entomol. 94:1178–1181 (18)

REFERENCES: 18 (al. viv., ap. viv., b, ld); 22 (b)

DISTRIBUTION: Canada: MB, ON

HOSTS: *Pinus banksiana* (18, 22)

***oregonensis*** (Wilson) 1915; *Lachnus*

ORIGINAL DESCRIPTION: Trans. Amer. Entomol. Soc. 41:103 (213)

TYPE: UMN (two slides labeled type) Ann. Entomol. Soc. Amer. 75(1):75 (34)

REFERENCES: 17 (b); 63 (ap. viv., al. viv., b, k, ld);

171 (fund., ap. viv., al. viv., ovip., ap. male, b, ld);

175 (fund., ap. viv., al. viv., ovip., ap. male, b, k, ld); 196 (k, n); 213 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: CA, CO, ID, OR, UT; Canada: AB, SK

HOSTS: *Pinus contorta* var. *latifolia* (17); *Pinus contorta* var. *murrayana* (63, 171);

*Pinus ponderosa* (63, 175)

***oregoni*** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:171–172 (118)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:172 (118)

REFERENCES: 118 (ap. viv.)

DISTRIBUTION: United States: OR; Canada: BC

HOSTS: *Pinus albicaulis* (53, 118)

***osborni*** Knowlton 1942; *Cinara*

ORIGINAL DESCRIPTION: Great Basin Nat. 3:7 (139)

TYPE: USNM (ap. viv. original designation) Great Basin Nat. 3:7 (139)

REFERENCES: 108 (k, ld); 122 (n); 139 (ap. viv., ld); 175 (ap. viv., k, ld); 204 (ap. viv., k)

DISTRIBUTION: United States: AZ, CA, NV, UT

HOSTS: *Abies concolor* (108); *Abies lasiocarpa* (108); *Pseudotsuga menziesii* (142, 175)

syn. ***alticola*** Hottes & Essig 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:151–152 (121)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 67:152 (121)

REFERENCES: 121 (ap. viv., ld); 122 (n. syn.)

DISTRIBUTION: United States: NV

HOSTS: none given, probably *Abies* spp.

syn. ***hirta*** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:209–210 (119)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:210 (119)

REFERENCES: 45 (n. syn.); 108 (k, ld); 119 (ap. viv., ld); 122 (n)

DISTRIBUTION: United States: AZ

HOSTS: *Abies concolor* (108, 122)

***osborni*** Tissot 1944; see ***pinivora*** (Wilson) 1919

***osborniana*** Tissot 1945; see ***pinivora*** (Wilson) 1919

***pacifica*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:21 (214)

TYPE: USNM Can. Entomol. 51:21 (214)

REFERENCES: 108 (k, ld); 174 (al. viv., ld); 214 (al. viv.)

DISTRIBUTION: United States: CA

HOSTS: *Abies grandis* (174, 214)



***pallidipes*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:8–10 (94)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:9 (94)

REFERENCES: 94 (ap. viv., al. male, ld); 111 (k, ld)

DISTRIBUTION: United States: ME

HOSTS: *Picea glauca* (94, 111)***palmerae*** (Gillette) 1917; see ***pruinosa*** (Hartig) 1841***parvavillosa*** Hottes 1955; see ***villosa*** (Gillette & Palmer) 1931***parvicornis*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:76–79 (97)

TYPE: USNM (ovip. original designation) Proc. Biol. Soc. Wash. 71:79 (97)

REFERENCES: 97 (ovip., al. male, ld)

DISTRIBUTION: United States: MT

HOSTS: *Pinus contorta* (97)***pergandei*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:46–47 (215)

TYPE: USNM (cotypes) Fla. Agr. Exp. Sta. Mono. Ser. 3:80 (182)

REFERENCES: 9 (b); 10 (b, k); 15 (b); 17 (b, ld); 22 (b); 174 (ap. viv., al. viv., ld); 177 (ap. viv., al. viv.); 179 (b); 182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p); 215 (ap. viv., al. viv.)

DISTRIBUTION: United States: AL, CT, DC, DE, FL, GA, LA, MD, MI, MN, NE, NC, NJ, NY, OH, PA, SC, VA, VT, WI; Canada: AB, BC, MB, NB, ON, PQ, SK

HOSTS: *Pinus banksiana* (10, 15); *Pinus clausa* (182); *Pinus contorta* var. *latifolia* (17, 180); *Pinus densiflora* (180); *Pinus echinata* (182); *Pinus glabra* (182); *Pinus mugo* (9, 10); *Pinus rigida* (180, 182); *Pinus taeda* (179, 182); *Pinus virginiana* (174, 215)syn. ***longispinosa*** Tissot 1932; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 16:4–5 (198)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 16:5 (198)

REFERENCES: 10 (n. syn.); 198 (ap. viv., al. viv., ld); 199 (b, k, ld); 200 (n)

DISTRIBUTION: United States: FL, LA, NJ, PA

HOSTS: *Pinus banksiana* (162); *Pinus glabra* (8, 199); *Pinus rigida* (180); *Pinus taeda* (198, 199); *Pinus virginiana* (180)***petersoni*** Bradley 1965; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 95:290–291 (19)

TYPE: CNC (ap. viv. original designation) Can. Entomol. 95:291 (19)

REFERENCES: 19 (ap. viv., ld)

DISTRIBUTION: Canada: MB

HOSTS: *Juniperus horizontalis* (19)***piceicola*** (Cholodkovsky) 1896; see ***pilicornis*** (Hartig) 1841***pilicornis*** (Hartig) 1841; *Aphis*

ORIGINAL DESCRIPTION: Z. Entomol. (Germar) 3:369 (68)

TYPE: types presumed lost Great Basin Nat. 21:46 (111)

REFERENCES: 43 (ap. viv., al. viv., b, k, ld); 68 (ap. viv.); 76 (n); 111 (k, ld); 184 (ap. viv., b, k, ld); 194 (ap. viv.)

DISTRIBUTION: United States: CA, DC, DE, ID, IL, MA, MD, NJ, OR, PA, UT;

Canada: BC, PQ

HOSTS: *Cryptomeria japonica* (208); *Picea abies* (142, 217); *Picea glauca* (217);

*Picea pungens* (208, 217); *Tsuga heterophylla* (52, 53)

syn. *piceicola* (Cholodkovsky) 1896; *Lachnus*

ORIGINAL DESCRIPTION: Zool. Anz. 19:148 (32)

TYPE: unknown Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):153 (43)

REFERENCES: 1 (b, k); 174 (fund., ap. viv., ovip., b, ld);

175 (fund., ap. viv., al. viv., ovip., ap. male, b, k, ld)

DISTRIBUTION: United States: CO, ID, IN, NY; Canada: NS

HOSTS: *Picea abies* (1, 175); *Picea glauca* (1, 153)

*pinata* Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:199–202 (85)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 68:202 (85)

REFERENCES: 85 (ap. viv., al. viv., ovip, ap. male); 107 (b, k, ld)

DISTRIBUTION: United States: CO

HOSTS: *Pinus edulis* (85, 107)

*pinea* (Mordvilko) 1895; *Lachnus*

ORIGINAL DESCRIPTION: Zool. Anz. 18:100 (166)

TYPE: unknown Fla. Agr. Exp. Sta. Mono. Ser. 3:89 (182)

REFERENCES: 5 (ap. viv., b, k, ld); 10 (b, k, as *pini* (Linnaeus)); 17 (b, ld);

43 (ap. viv., al. viv., b, k, ld); 44 (k, ld, n); 69 (b); 166 (ap. viv., al. viv.);

175 (ap. viv., al. viv., ovip., al. male, b, k, ld);

182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p); 184 (ap. viv., b, k, ld); 204 (ap. viv., k)

DISTRIBUTION: United States: DC, IA, IN, ME, MD, MI, MN, NB, NC, NJ, NY, OH, OR, PA, SC, UT, VA, WV, WI; Canada: AB, BC, MB, NB, ON, PE, PQ

HOSTS: *Pinus banksiana* (182, 185); *Pinus nigra* (43, 182); *Pinus resinosa* (182);

*Pinus rigida* (182); *Pinus strobus* (182); *Pinus sylvestris* (43, 182); *Pinus taeda* (149);

*Pinus virginiana* (69, 182)

syn. *inoptis* (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:18 (214)

TYPE: USNM Can. Entomol. 51:18 (214)

REFERENCES: 174 (ap. viv., al. viv., ld); 177 (ap. viv., al. viv.) 182 (n. syn.);

214 (ap. viv., al. viv.)

DISTRIBUTION: United States: CT, DC

HOSTS: *Pinus virginiana* (177, 214)

*pini* (Linnaeus) 1758; *Aphis*

ORIGINAL DESCRIPTION: Systemae Naturae Tom. 1:453 (161)

TYPE: none Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):160 (43)

REFERENCES: 10 (misidentification of *pinea* (Mordvilko)); 27 (b); 43 (ap. viv., al. viv., b, k);

57 (n); 63 (ap. viv., ld); 78 (n); 124 (n); 143 (n); 163 (b); 175 (n); 177 (ap. viv., al. viv.);

209 (ovip., ld)

DISTRIBUTION: United States: CT, FL, IL, MN, MO, NC, NJ, UT

HOSTS: *Pinus nigra* (142); *Pinus sylvestris* (43, 63); *Pinus taeda* (163, 164)

***pinicola*** (Kaltenbach) 1843; *Lachnus*

ORIGINAL DESCRIPTION: Mono. Fam. Pflanzenläuse 154–155 (129)

TYPE: unknown Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):152 (43)

REFERENCES: 1 (b, k); 124 (n); 129 (ap. viv., al. viv.); 177 (ap. viv., al. viv.)

DISTRIBUTION: United States: CT, IL, IN, NJ; Canada: NB, NS

HOSTS: *Picea glauca* (1); *Picea rubens* (31)***piniradicis*** Bradley 1959; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 91:453–456 (23)

TYPE: CNC (al. viv. original designation) Can. Entomol. 91:456 (23)

REFERENCES: 15 (b); 17 (b, ld); 23 (fund., ap. viv., al. viv., ovip., ap. male, b, ld);

182 (ap. viv., al. viv., ovip., b, k, ld, p)

DISTRIBUTION: United States: MI; Canada: AB, MB, ON, SK

HOSTS: *Pinus banksiana* (15, 23)***pinivora*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:44 (215)

TYPE: USNM (al. viv. lectotype) Fla. Agr. Exp. Sta. Mono. Ser. 3:104 (182)

REFERENCES: 15 (b); 17 (b, ld); 104 (al. viv., ld); 105 (ap. viv., ld); 177 (al. viv.); 179 (b);

182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p); 203 (ap. viv., al. viv., k)

DISTRIBUTION: United States: AL, CT, DC, DE, FL, GA, LA, MD, MI, MO, NC, NY, OK, PA, SC, TN, UT, VA; Canada: ON, SK

HOSTS: *Pinus banksiana* (15, 182); *Pinus clausa* (182); *Pinus elliottii* (182);*Pinus pungens* (182); *Pinus resinosa* (182); *Pinus rigida* (153, 182); *Pinus sylvestris* (182);*Pinus taeda* (179, 182); *Pinus virginiana* (105, 182)syn. ***osborni*** Tissot 1944; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 27:45–48 (200)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 27:47–48 (200)

REFERENCES: 200 (ap. viv., al. viv., ld); 201 (name preoccupied by *osborni* Knowlton)

DISTRIBUTION: United States: FL

HOSTS: *Pinus palustris* (200); *Pinus taeda* (200)syn. ***osborniana*** Tissot 1945; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 27:45–48 (200)

TYPE: USNM (al. viv. original description) Fla. Entomol. 27:47–48 (200)

REFERENCES: 182 (n. syn.); 200 (ap. viv., al. viv., ld);

201 (replacement name for *osborni* Tissot)

DISTRIBUTION: United States: FL

HOSTS: *Pinus palustris* (200); *Pinus taeda* (200)***piñona*** Hottes 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:153–154 (76)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 66:153–154 (76)

REFERENCES: 35 (b, k, ld); 76 (ap. viv., al. viv.); 81 (ovip., al. male)

DISTRIBUTION: United States: CA, CO

HOSTS: *Pinus edulis* (81, 107)***poketa*** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69: 220–221 (90)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 69:221 (90)

REFERENCES: 35 (ovip., k, ld); 90 (ap. viv., ld)

DISTRIBUTION: United States: CA, AZ

HOSTS: *Pinus edulis* (90, 107)

***ponderosae*** (Williams) 1910; *Lachnus*

ORIGINAL DESCRIPTION: Univ. Nebr. Contr. Entomol. 10:85–175 (210)

TYPE: USNM The Thomas Say Foundation 5:41 (175)

REFERENCES: 38 (ld, n); 59 (fund., ovip., ld); 63 (ap. viv., al. viv., b, k, ld); 128 (ld, n);

143 (n); 175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 196 (k, n);

204 (ap. viv., al. viv., b, k, p); 206 (b); 210 (ap. viv., al. viv., al. male)

DISTRIBUTION: United States: CA, CO, ID, NB, OR, UT; Canada: BC

HOSTS: *Pinus canariensis* (160); *Pinus douglasiana* (208); *Pinus greggii* (208);

*Pinus jeffreyi* (196, 206); *Pinus michoacana* (208); *Pinus nigra* (208); *Pinus occidentalis* (208);

*Pinus ponderosa* (59, 143); *Pinus ponderosa* var. *scopulorum* (63, 210); *Pinus quadrifolia* (208)

syn. ***onatei*** Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:167–168 (118)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:168 (118)

REFERENCES: 45 (n. syn.); 118 (al. viv., ap. viv.)

DISTRIBUTION: United States: CA

HOSTS: *Pinus jeffreyi* (118)

***pruinosa*** (Hartig) 1841; *Lachnus*

ORIGINAL DESCRIPTION: Z. Entomol. (German) 3:368 (68)

TYPE: none Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):132 (43)

DISTRIBUTION: United States: UT

HOSTS: *Picea engelmannii* (142); *Picea pungens* (142)

syn. ***palmerae*** (Gillette) 1917; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 10:135 (58)

TYPE: USNM The Thomas Say Foundation 5:39 (175)

REFERENCES: 1 (b, n); 15 (b); 17 (b); 45 (n. syn.); 63 (ap. viv., al. viv., b, k, ld); 111 (k, ld);

124 (n); 129 (b, k); 175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld)

DISTRIBUTION: United States: CO, ID, IL, IN, NJ, PA; Canada: MB, NS, ON, PQ, SK

HOSTS: *Larix laricina* (1); *Picea abies* (180); *Picea englemanni* (63, 111); *Picea glauca* (1, 15);

*Picea mariana* (1, 15); *Picea pungens* (111, 175)

***pseudoschwarzii*** Palmer 1936; *Cinara*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 29:274–275 (172)

TYPE: USNM (al. viv. original designation) Ann. Entomol. Soc. Amer. 29:275 (172)

REFERENCES: 172 (fund., ap. viv., al. viv., ld); 173 (fund., ap. viv., al. viv., b, ld);

175 (fund., ap. viv., al. viv., b, k, ld)

DISTRIBUTION: United States: CO

HOSTS: *Pinus ponderosa* (172, 173)

***pseudotaxifoliae*** Palmer 1952; *Cinara*

ORIGINAL DESCRIPTION: The Thomas Say Foundation 5:41–43 (175)

TYPE: USNM The Thomas Say Foundation 5:43 (175)

REFERENCES: 17 (b, ld); 114 (k, ld); 128 (b);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld);

204 (fund., ap. viv., al. viv., ovip., al. male, b, k, p)



DISTRIBUTION: United States: CA, CO, ID, OR, UT, WA; Canada: AB, BC  
HOSTS: *Pseudotsuga menziesii* (53, 142); *Pseudotsuga menziesii* var. *glauca* (17)

***pseudotsugae*** (Wilson) 1912; *Lachnus*

ORIGINAL DESCRIPTION: Can. Entomol. 44:302–303 (212)  
TYPE: UMN (lectotype) Ann. Entomol. Soc. Amer. 75(1):76 (34)  
REFERENCES: 17 (b, ld); 63 (ap. viv., al. viv., b, k, ld); 114 (k, ld);  
171 (fund., ap. viv., al. viv., ovip., al. male, b, ld);  
175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld);  
204 (fund., ap. viv., al. viv., ovip., al. male, b, k, p); 212 (ap. viv., al. viv., ovip., al. male)  
DISTRIBUTION: United States: AZ, CA, CO, OR, UT; Canada: BC  
HOSTS: *Pseudotsuga menziesii* (63, 171); *Pseudotsuga menziesii* var. *glauca* (17)

***puerca*** Hottes 1954; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 67:251–253 (82)  
TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 67:252 (82)  
REFERENCES: 80 (n); 83 (al. viv.); 107 (b, k, ld)  
DISTRIBUTION: United States: AZ, CO  
HOSTS: *Pinus edulis* (82, 83)

***pulverulens*** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:40–41 (59)  
TYPE: USNM Ann. Entomol. Soc. Amer. 17:41 (59)  
REFERENCES: 59 (ap. viv., al. viv., ovip., ld); 63 (ap. viv., al. viv., b, k, ld); 133 (n);  
175 (ap. viv., al. viv., ovip., al. male, b, k, ld)  
DISTRIBUTION: United States: CO, ID, UT  
HOSTS: *Juniperus osteosperma* (175); *Juniperus scopulorum* (59, 175)

***radicivora*** Voegtlin 1982; *Cinara*

ORIGINAL DESCRIPTION: Pan-Pacific Entomol. 58(3):196–201 (205)  
TYPE: INHS (ap. viv. original designation) Pan-Pacific Entomol. 58(3):199 (205)  
REFERENCES: 205 (ap. viv., al. viv., b, k, ld)  
DISTRIBUTION: United States: CA, OR  
HOSTS: *Abies concolor* (205)

***rara*** Bradley 1956; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 88:708 (13)  
TYPE: CNC (ovip. original designation) Can. Entomol. 88:708 (13)  
REFERENCES: 13 (ovip., al. male, ld); 111 (n); 115 (n)  
DISTRIBUTION: United States: AK; Canada: SK  
HOSTS: *Picea mariana* (13, 111)

***rigidae*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:5–7 (94)  
TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 71:7 (94)  
REFERENCES: 94 (ap. viv., al. viv.); 182 (ap. viv., al. viv., b, k, ld)  
DISTRIBUTION: United States: NH  
HOSTS: *Pinus rigida* (94)

***rubicunda*** (Wilson) 1915; *Lachnus*

ORIGINAL DESCRIPTION: Trans. Amer. Entomol. Soc. 41:105 (213)  
TYPE: UMN Ann. Entomol. Soc. Amer. 75(1):76 (34)

REFERENCES: 10 (misidentification of *juniperi* (De Geer)); 213 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: OR

HOSTS: *Juniperus occidentalis* (213)

***russellae*** Pepper & Tissot 1973; *Cinara*

ORIGINAL DESCRIPTION: Fla. Agr. Exp. Sta. Mono. Ser. 3:110–117 (182)

TYPE: USNM (ap. viv. original designation) Fla. Agr. Exp. Sta. Mono. Ser. 3:116 (182)

REFERENCES: 182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p)

DISTRIBUTION: United States: MI

HOSTS: *Pinus banksiana* (182)

***rustica*** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:83–85 (88)

TYPE: USNM (ovip. original designation) Proc. Biol. Soc. Wash. 69:84 (88)

REFERENCES: 88 (ap. viv., ovip.); 90 (ap. viv., ovip., ld); 93 (al. viv., ld);

107 (ap. male, b, k, ld)

DISTRIBUTION: United States: AZ, CO

HOSTS: *Pinus edulis* (88, 93)

***sabinae*** (Gillette & Palmer) 1924; see ***cupressi*** (Buckton) 1881

***sabinianus*** (Swain) 1919; see ***arizonica*** (Wilson) 1919

***saccharinipini*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:157–159 (101)

TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:159 (101)

REFERENCES: 101 (ap. viv., al. viv., ld); 204 (ap. viv., k)

DISTRIBUTION: United States: CA

HOSTS: *Pinus lambertiana* (101)

***saskensis*** Bradley 1962; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 94:1181–1182 (18)

TYPE: CNC (al. viv. original designation) Can. Entomol. 94:1182 (18)

REFERENCES: 18 (al. viv., b, ld)

DISTRIBUTION: Canada: BC, MB, SK

HOSTS: *Picea engelmannii* (53); *Picea glauca* (18)

***schuhi*** Hottes 1957; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 70:4–6 (92)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 70:6 (92)

REFERENCES: 92 (ap. viv., al. viv., ld); 108 (k, ld)

DISTRIBUTION: United States: OR

HOSTS: *Abies concolor* (92, 108)

***schwarzii*** (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:46 (215)

TYPE: USNM Can. Entomol. 51:46 (215)

REFERENCES: 57 (n); 63 (ap. viv., al. viv., b, k, ld); 121 (n); 170 (ap. viv., al. viv., b, ld, p);

171 (fund., ap. viv., al. viv., ovip., al. male, b, ld);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld);

204 (ap. viv., al. viv., ovip., al. male, b, k, p); 215 (ap. viv., al. viv.)

DISTRIBUTION: United States: AZ, CA, CO, DC, IN, MD, OR, UT; Mexico: DF  
HOSTS: *Pinus cooperi* (170); *Pinus jeffreyi* (204); *Pinus ponderosa* (204, 215);  
*Pinus ponderosa* var. *scopulorum* (57, 63); *Pinus virginiana* (154)

***sclerosa*** Richards 1956; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 88:203–204 (186)  
TYPE: CNC (ap. viv. original designation) Can. Entomol. 88:204 (186)  
REFERENCES: 186 (ap. viv., ld)  
DISTRIBUTION: Canada: BC  
HOSTS: *Pinus contorta* (186)

***serrai*** Hottes & Essig 1953; see ***arizonica*** (Wilson) 1919

***setulosa*** Hottes & Essig 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:61–63 (123)  
TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 68:62–63 (123)  
REFERENCES: 93 (ovip., al. male, ld); 108 (k, ld); 122 (ap. viv.); 123 (ap. viv.)  
DISTRIBUTION: United States: OR  
HOSTS: *Abies magnifica* (93, 122)

***sibiricae*** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:12–14 (59)  
TYPE: USNM Ann. Entomol. Soc. Amer. 17:14 (59)  
REFERENCES: 59 (fund., ap. viv., al. viv., ovip., ap. male, ld); 63 (ap. viv., al. viv., b, k, ld);  
174 (n); 175 (fund., ap. viv., al. viv., ovip., ap. male, b, k, ld)  
DISTRIBUTION: United States: CA, CO, DE, IN, OR, UT, WA  
HOSTS: *Juniperus communis* (59, 63); *Juniperus scopulorum* (208)

***similis*** (Gillette & Palmer) 1924; see ***medispinosa*** (Gillette & Palmer) 1929

***sitchensis*** Hottes 1958; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 71:61–62 (95)  
TYPE: UCB (ap. viv. original designation) Proc. Biol. Soc. Wash. 71:62 (95)  
REFERENCES: 95 (ap. viv., ld); 111 (k, ld)  
DISTRIBUTION: CA  
HOSTS: *Picea sitchensis* (95, 111)

***solitaria*** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DISTRIBUTION: Ann. Entomol. Soc. Amer. 17:17–19 (59)  
TYPE: USNM Ann. Entomol. Soc. Amer. 17:19 (59)  
REFERENCES: 59 (fund., ap. viv., al. viv., ovip., ld); 63 (ap. viv., al. viv., b, k, ld);  
133 (ap. viv.); 175 (fund., ap. viv., al. viv., ovip., b, k, ld)  
DISTRIBUTION: United States: CO, UT  
HOSTS: *Pinus ponderosa* (59, 133); *Pinus ponderosa* var. *scopulorum* (63, 175)

***sonata*** Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:202–203 (85)  
TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 68:203 (85)  
REFERENCES: 85 (ap. viv.); 93 (al. viv., ovip., al. male, ld); 108 (k, ld)  
DISTRIBUTION: United States: ID, OR, WA; Canada: BC  
HOSTS: *Abies concolor* (85); *Abies grandis* (85, 93)

**soplada** Hottes 1956; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 69:65–67 (86)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 69:67 (86)

REFERENCES: 86 (ap. viv.); 94 (al. male, ld); 111 (k, ld)

DISTRIBUTION: United States: ME

HOSTS: *Picea* sp. (86, 94)

**spiculosa** Bradley 1956; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 88:492–494 (12)

TYPE: CNC (ap. viv. original designation) Can. Entomol. 88:492–494 (12)

REFERENCES: 12 (ap. viv., al. viv., ld); 15 (b); 17 (b, ld)

DISTRIBUTION: Canada: AB, MB, NB, NS, ON, SK

HOSTS: *Larix laricina* (12, 15)

**splendens** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:14–17 (59)

TYPE: USNM Ann. Entomol. Soc. Amer. 17:17 (59)

REFERENCES: 17 (b); 59 (fund., ap. viv., al. viv., ovip., al. male, ld);

63 (ap. viv., al. viv., b, k, ld); 114 (k, ld);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld)

DISTRIBUTION: United States: CO, UT; Canada: BC

HOSTS: *Pseudotsuga menziesii* (59, 63)

**strobi** (Fitch) 1851; *Eriosoma*

ORIGINAL DESCRIPTION: Ann. Rep. N.Y. State Cab. Nat. Hist. 4:65 (49)

TYPE: USNM (al. viv.) Fla. Agr. Exp. Sta. Mono. Ser. 3:122 (182)

REFERENCES: 1 (ap. viv., b, k); 10 (b, k); 15 (b); 27 (b); 49 (ap. viv., al. viv., b);

50 (ap. viv., al. viv., b); 124 (n); 165 (b); 177 (ap. viv., al. viv.);

182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p); 183 (b); 187 (b); 197 (ap. viv., al. viv., b);

209 (ovip., al. male, b, ld)

DISTRIBUTION: United States: AR, CT, DC, DE, IL, IN, MA, MD, ME, MI, MO, NC, NH, NJ, NY, OH, PA, SC, VA, WI; Canada: NB, NS, ON, PQ

HOSTS: *Pinus banksiana* (162); *Pinus resinosa* (162); *Pinus strobus* (10, 15)

**subterranea** Bradley 1956; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 88:494 (12)

TYPE: CNC (ovip. original designation) Can. Entomol. 88:494 (12)

REFERENCES: 12 (ovip., ld); 17 (b)

DISTRIBUTION: Canada: AB, MB

HOSTS: *Larix laricina* (12, 17)

**taedae** Tissot 1932; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 16:5–7 (198)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 16:6 (198)

REFERENCES: 69 (b); 182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p);

198 (ap. viv., al. viv., ld); 199 (k, ld)

DISTRIBUTION: United States: FL, MD, NC, PA, VA

HOSTS: *Pinus clausa* (182); *Pinus elliottii* (182); *Pinus glabra* (182); *Pinus pungens* (182);

*Pinus rigida* (180, 182); *Pinus serotina* (182); *Pinus taeda* (198, 199); *Pinus virginiana* (69, 182)



**tanneri** (Knowlton) 1930; *Lachnus*

ORIGINAL DESCRIPTION: Can. Entomol. 62:155 (133)

TYPE: USNM [?]

REFERENCES: 107 (b, k, ld); 133 (ap. viv., al. viv., ld); 175 (ap. viv., b)

DISTRIBUTION: United States: UT

HOSTS: *Pinus edulis* (107); *Pinus monophylla* (107, 133)**taxifoliae** (Swain) 1918; *Lachnus*

ORIGINAL DESCRIPTION: Trans. Am. Entomol. Soc. 44:11–14 (195)

TYPE: UCB (ap. viv. lectotype) Proc. Biol. Soc. Wash. 74:114 (114)

REFERENCES: 63 (ap. viv., al. viv., b, k, ld); 120 (ap. viv., al. viv., ld); 143 (n);

171 (fund., ap. viv., al. viv., ovip., al. male, b, ld); 195 (ap. viv., al. viv., ld); 196 (k, n)

DISTRIBUTION: United States: AZ, CA, CO, ID, OR, UT

HOSTS: *Pseudotsuga menziesii* (143, 171)**terminalis** (Gillette & Palmer) 1924; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 17:19–21 (59)

TYPE: USNM (lectotype) Proc. Biol. Soc. Wash. 73:211 (107)

REFERENCES: 59 (fund., ap. viv., al. viv., ovip., al. male, ld);

63 (ap. viv., al. viv., b, k, ld); 107 (k, ld); 170 (ap. viv., al. viv., b, ld, p);

175 (fund., ap. viv., al. viv., ovip., al. male, b, k, ld); 204 (ap. viv., k)

DISTRIBUTION: United States: CO, UT; Mexico: DF, MEX, MICH

HOSTS: *Pinus cembroides* (170); *Pinus edulis* (59, 107); *Pinus leiophylla* (170);*Pinus michoacana* (170); *Pinus patula* (170); *Pinus pseudostrobus* (170)**thatcheri** Knowlton & Smith 1938; *Cinara*

ORIGINAL DESCRIPTION: Entomol. News 49:66 (143)

TYPE: USNM Entomol. News 49:66 (143)

REFERENCES: 1 (b, k); 143 (al. viv., ap. viv., ld); 175 (n)

DISTRIBUTION: United States: ID, IN, UT; Canada: BC, NS

HOSTS: *Picea glauca* (1); *Pinus ponderosa* (143, 175)**tonaluca** Hottes & Wehrle 1951; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 64:45–46 (126)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 64:46 (126)

REFERENCES: 74 (n); 126 (ap. viv., al. viv.)

DISTRIBUTION: United States: AZ

HOSTS: *Juniperus monosperma* (126)**tsugae** Bradley 1960; *Cinara*

ORIGINAL DESCRIPTION: Can. Entomol. 92:605–608 (16)

TYPE: CNC (al. viv. original designation) Can. Entomol. 92:607 (16)

REFERENCES: 16 (fund., al. viv., ap. viv., ovip., b, ld); 17 (b, ld); 114 (k, ld)

DISTRIBUTION: United States: OR; Canada: BC

HOSTS: *Tsuga heterophylla* (16, 114)**tujafilina** (Del Guercio) 1909; *Lachniella*

ORIGINAL DESCRIPTION: Redia 5:311–312 (40)

TYPE: unknown Bull. Brit. Mus. Nat. Hist. (Entomol.) 27(2):166 (43)

REFERENCES: 5 (ap. viv., b, k, ld); 29 (b, p); 40 (ap. viv.); 43 (ap. viv., al. viv., b, k, ld); 165 (b); 196 (k, n); 199 (b, k, ld, n); 200 (n); 203 (al. viv., ap. viv., k)

DISTRIBUTION: United States: CA, DE, FL, ID, KS, LA, MD, MI, MO, NJ, OK, OR, PA, TX, UT, VA

HOSTS: *Callitris columellaris* (208); *Callitris drummondii* (208); *Callitris gracilis* (208);

*Callitris morrisonii* (208); *Callitris murrayensis* (208); *Callitris propinqua* (208);

*Callitris rhomboidea* (208); *Chamaecyparis lawsoniana* (208);

*Cupressus goveniana* var. *pygmaea* (208); *Juniperus* sp. (43); *Pinus coulteri* (208);

*Thuja occidentalis* (43, 196); *Thuja orientalis* (152, 203); *Widdringtonia juniperoides* (208)

syn. *winonkae* Hottes 1934; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 47:1–2 (72)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 47:2 (72)

REFERENCES: 24 (ap. viv., al. viv., b); 72 (al. viv.); 76 (n. syn.);

175 (ap. viv., al. viv., b, k, ld)

DISTRIBUTION: United States: DE, ID, IN, LA, UT

HOSTS: *Thuja orientalis* (24)

*tunicula* Hottes 1958; see *gracilis* (Wilson) 1919

*utahensis* Knowlton & Smith 1938; *Cinara*

ORIGINAL DESCRIPTION: Entomol. News 49:66–68 (143)

TYPE: USNM Entomol. News 49:66 (143)

REFERENCES: 143 (ap. viv., al. viv., ld)

DISTRIBUTION: United States: UT

HOSTS: *Abies lasiocarpa* (143)

*vagabunda* Hottes & Essig 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:206–208 (119)

TYPE: UCB (al. viv. original designation) Proc. Biol. Soc. Wash. 66:207 (119)

REFERENCES: 114 (ap. viv., k, ld); 119 (al. viv.)

DISTRIBUTION: United States: AZ, MN

HOSTS: *Pinus* sp. (119); *Pseudotsuga menziesii* (114)

*vanduzeei* (Swain) 1919; see *confinis* (Koch) 1856

*vandykei* (Wilson) 1919; *Lachniella*

ORIGINAL DESCRIPTION: Can. Entomol. 51:19–20 (214)

TYPE: UMN Ann. Entomol. Soc. Amer. 75(1):77 (34)

REFERENCES: 17 (b, ld); 63 (ap. viv., al. viv., b, k, ld); 111 (k, ld); 115 (n);

171 (fund., ap. viv., al. viv., ovip., ap. male, b, ld);

175 (fund., ap. viv., al. viv., ovip., ap. male, b, k, ld); 214 (ap. viv., al. viv.)

DISTRIBUTION: United States: AK, CO, WA; Canada: BC, NB, NF, NS, ON

HOSTS: *Picea engelmannii* (63, 111); *Picea glauca* (115); *Picea sitchensis* (17, 53)

*villosa* (Gillette & Palmer) 1931; *Lachnus*

ORIGINAL DESCRIPTION: Ann. Entomol. Soc. Amer. 24:847 (63)

TYPE: USNM Ann. Entomol. Soc. Amer. 24:847 (63)

REFERENCES: 17 (b); 63 (k, n); 84 (n); 175 (b, k, ld, n)

DISTRIBUTION: United States: CO, ID, UT; Canada: AB, BC

HOSTS: *Pinus flexilis* (63, 175)

ssp. *curtivillosa* Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:102 (84)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 68:102 (84)

REFERENCES: 84 (ap. viv.)

DISTRIBUTION: United States: AZ

HOSTS: *Pinus flexilis* (84)ssp. *parvavillosa* Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:101 (84)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 68:101 (84)

REFERENCES: 84 (ap. viv., al. viv.)

DISTRIBUTION: United States: AZ

HOSTS: *Pinus flexilis* (84)*wacasassae* Tissot 1944; see *fresai* Blanchard 1939*wahhaka* Hottes 1951; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 64:145 (73)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 64:145 (73)

REFERENCES: 73 (ap. viv., ovip.); 75 (al. viv.); 77 (ap. male)

DISTRIBUTION: United States: CO

HOSTS: *Juniperus osteosperma* (73)*wahluca* Hottes 1952; *Cinara*

ORIGINAL DESCRIPTION: Great Basin Nat. 12:59–61 (74)

TYPE: USNM (ap. viv. original designation) Great Basin Nat. 12:61 (74)

REFERENCES: 74 (ap. viv., ovip., ap. male); 76 (ap. viv.)

DISTRIBUTION: United States: CO

HOSTS: *Juniperus scopulorum* (74, 76)*wahsugae* Hottes 1960; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 73:197–198 (106)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 73:197 (106)

REFERENCES: 106 (ap. viv., ovip., al. male, ld); 114 (k, ld)

DISTRIBUTION: United States: OR, WA

HOSTS: *Tsuga mertensiana* (114)*wahtolca* Hottes 1953; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 66:155–157 (76)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 66:157 (76)

REFERENCES: 76 (ap. viv., al. viv.); 81 (ovip.); 89 (al. male); 90 (al. male, ld); 107 (b, k, ld); 204 (ap. viv., k)

DISTRIBUTION: United States: AZ, CA, CO, NV

HOSTS: *Pinus cembroides* (76); *Pinus edulis* (81, 107); *Pinus monophylla* (107)ssp. *curtiwahtolca* Hottes 1955; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 68:101–102 (84)

TYPE: USNM (ap. viv. original designation) Proc. Biol. Soc. Wash. 68:102 (84)

REFERENCES: 84 (ap. viv.)

DISTRIBUTION: United States: AZ, UT

HOSTS: *Pinus edulis* (84); *Pinus monophylla* (142)

*wanepae* Hottes 1933; *Cinara*

ORIGINAL DESCRIPTION: Proc. Biol. Soc. Wash. 46:5 (71)

TYPE: USNM (al. viv. original designation) Proc. Biol. Soc. Wash. 46:5 (71)

REFERENCES: 71 (al. viv., ovip.); 173 (n)

DISTRIBUTION: United States: CO

HOSTS: *Picea pungens* (71, 173)

*watsoni* Tissot 1939; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 22:43–47 (199)

TYPE: USNM (al. viv. original designation) Fla. Entomol. 22:46 (199)

REFERENCES: 28 (b); 48 (b); 179 (b); 182 (ap. viv., al. viv., ovip., al. male, b, k, ld, p);

199 (ap. viv., al. viv., b, k, ld); 200 (n); 203 (ap. viv., al. viv., k)

DISTRIBUTION: United States: AR, DE, FL, GA, LA, MD, MI, MS, NC, NJ, NY, OH, OK, PA, SC, VA, WV

HOSTS: *Pinus banksiana* (182); *Pinus clausa* (182); *Pinus echinata* (28, 182);

*Pinus elliotii* (182, 199); *Pinus glabra* (182, 199); *Pinus pungens* (182); *Pinus resinosa* (180);

*Pinus rigida* (155, 182); *Pinus serotina* (182); *Pinus sylvestris* (180); *Pinus taeda* (199, 200);

*Pinus virginiana* (28, 199)

*westi* Tissot & Pepper 1967; *Cinara*

ORIGINAL DESCRIPTION: Fla. Entomol. 50:7–10 (202)

TYPE: USNM (al. viv.) Fla. Entomol. 50:10 (202)

REFERENCES: 182 (ap. viv., al. viv., b, k, ld, p); 202 (ap. viv., al. viv., b, ld)

DISTRIBUTION: United States: FL, SC

HOSTS: *Pinus taeda* (182, 202)

*winonkae* Hottes 1934; see *tujafilina* (Del Guercio) 1909*yukona* Hottes 1964; *Cinara*

ORIGINAL DESCRIPTION: Entomol. Ber. 24:53–54 (115)

TYPE: USNM (al. viv. original designation) Entomol. Ber. 24:54 (115)

REFERENCES: 115 (al. viv., ld)

DISTRIBUTION: United States: AK

HOSTS: *Picea glauca* (115)

*zoarcbursara* Knowlton 1935; *Cinara*

ORIGINAL DESCRIPTION: Pan-Pac. Entomol. 11:139–140 (136)

TYPE: USNM [?] (only ap. viv. in original description)

REFERENCES: 136 (ap. viv.)

DISTRIBUTION: United States: UT

HOSTS: *Abies concolor* (136, 142)



## Bibliography

Many papers in the literature on aphids are made up almost entirely of lists of species found in particular geographical locations. These papers vary from simple lists of species to lists that include species, hosts, collection dates, and collectors. Although such lists do not contain enough information to warrant including them under the reference heading in the species list, information in them on hosts and localities has been included under the host and distribution headings. In the interest of completeness, however, we have included these citations here preceded by asterisks. Following each such citation is a list of the species mentioned in the paper.

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- \*217. Wilson, H.F., and R.A. Vickery. 1918. A species list of the Aphididae of the world and their recorded food plants. *Transactions of the Wisconsin Academy of Science, Arts and Letters* 19(Part 1):22–355. Species: *abieticola*, *abietis*, *australis*, *confinis*, *costata*, *cupressi*, *curvipes*, *glehna*, *laricifex*, *laricifoliae*, *occidentalis*, *oregonensis*, *piceicola*, *pilicornis*, *pineae*, *pini*, *pinicola*, *ponderosae*, *pruinosa*, *pseudotsugae*, *rubicunda*, *strobi*, *tujafilina*.
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## List of Hosts

### Family Cupressaceae

- Callitris columellaris* F.J. Muell.  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Callitris drummondii* Benth.  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Callitris gracilis* R.T. Baker  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Callitris morrisonii* R.T. Baker  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Callitris murrayensis* Miq.  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Callitris propinqua* R. Br.  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Callitris rhomboidea* R. Br.  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Calocedrus decurrens* (Torr.) Florin  
*juniperi* (De Geer) 1773; *Aphis*
- Chamaecyparis lawsoniana* (A. Murr.) Parl.  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Cupressus goveniana* var. *pygmaea* Lemm.  
*fresai* Blanchard 1939; *Cinara*  
*juniperi* (De Geer) 1773; *Aphis*  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Cupressus macnabiana* A. Murr.  
*fresai* Blanchard 1939; *Cinara*
- Cupressus macrocarpa* Hartw.  
*cupressi* (Buckton) 1881; *Lachnus*
- Cupressus sempervirens* L.  
*fresai* Blanchard 1939; *Cinara*
- Cupressus* sp.  
*louisianensis* Boudreaux 1948; *Cinara*
- Juniperus chinensis* L.  
*cupressi* (Buckton) 1881; *Lachnus*  
*fresai* Blanchard 1939; *Cinara*  
*juniperi* (De Geer) 1773; *Aphis*
- Juniperus communis* L.  
*cognita* Hottes & Essig 1954; *Cinara*  
*fresai* Blanchard 1939; *Cinara*  
*juniperensis* (Gillette & Palmer) 1925;  
*Lachnus*  
*juniperi* (De Geer) 1773; *Aphis*  
*sibiricae* (Gillette & Palmer) 1924;  
*Lachnus*
- Juniperus horizontalis* Moench  
*fresai* Blanchard 1939; *Cinara*  
*manitobensis* Bradley 1963; *Cinara*  
*petersoni* Bradley 1965; *Cinara*
- Juniperus monosperma* (Engelm.) Sarg.  
*fresai* Blanchard 1939; *Cinara*  
*tonaluca* Hottes & Wehrle 1951; *Cinara*
- Juniperus occidentalis* Hook.  
*fresai* Blanchard 1939; *Cinara*  
*rubicunda* (Wilson) 1915; *Lachnus*
- Juniperus osteosperma* (Torr.) Little  
*burrilli* (Wilson) 1919; *Lachniella*  
*pulverulens* (Gillette & Palmer) 1924;  
*Lachnus*  
*wahhaka* Hottes 1951; *Cinara*
- Juniperus sabina* L.  
*fresai* Blanchard 1939; *Cinara*
- Juniperus scopulorum* Sarg.  
*burrilli* (Wilson) 1919; *Lachniella*  
*cupressi* (Buckton) 1881; *Lachnus*  
*fresai* Blanchard 1939; *Cinara*  
*pulverulens* (Gillette & Palmer) 1924;  
*Lachnus*  
*sabinae* (Gillette & Palmer) 1924; *Lachnus*  
*sibiricae* (Gillette & Palmer) 1924; *Lachnus*  
*wahluca* Hottes 1952; *Cinara*
- Juniperus silicicola* (Small) Bailey  
*fresai* Blanchard 1939; *Cinara*  
*juniperivora* (Wilson) 1919; *Lachnus*  
*wacasassae* Tissot 1944; *Cinara*
- Juniperus* sp.  
*curvipes* (Patch) 1912; *Lachnus*  
*tujafilina* (Del Guercio) 1909; *Lachniella*
- Juniperus squamata* Lamb.  
*fresai* Blanchard 1939; *Cinara*  
*juniperi* (De Geer) 1773; *Aphis*

*Juniperus virginiana* L.

*canadensis* Hottes & Bradley 1953; *Cinara cupressi* (Buckton) 1881; *Lachnus difficilis* Hottes & Frison 1931; *Cinara fresai* Blanchard 1939; *Cinara juniperi* (De Geer) 1773; *Aphis juniperivora* (Wilson) 1919; *Lachnus sabinae* (Gillette & Palmer) 1924; *Lachnus*

*Thuja occidentalis* L.

*juniperi* (De Geer) 1773; *Aphis tujafilina* (Del Guercio) 1909; *Lachniella*

*Thuja orientalis* (L.) Franco

*louisianensis* Boudreaux 1948; *Cinara tujafilina* (Del Guercio) 1909; *Lachniella winonkae* Hottes 1934; *Cinara*

*Thuja* sp.

*cupressi* (Buckton) 1881; *Lachnus idahoensis* Knowlton 1935; *Cinara*

*Widdringtonia juniperoides* Endl.

*tujafilina* (Del Guercio) 1909; *Lachniella*

Family **Pinaceae***Abies amabilis* Dougl. ex Forbes

*occidentalis* (Davidson) 1909; *Lachnus*

*Abies balsamea* (L.) Mill.

*abieticola* (Cholodkovsky) 1899; *Lachnus curvipes* (Patch) 1912; *Lachnus lasiocarpae* (Gillette & Palmer) 1930; *Lachnus occidentalis* (Davidson) 1909; *Lachnus*

*Abies concolor* (Gord. & Glend.) Lindl. ex

*abieticola* (Cholodkovsky) 1899; *Lachnus abietis* (Fitch) 1851; *Lachnus alacra* Hottes & Essig 1953; *Cinara curtihirsuta* Hottes & Essig 1954; *Cinara curvipes* (Patch) 1912; *Lachnus ferrisi* (Swain) 1918; *Lachnus gentneri* Hottes 1957; *Cinara grande* Hottes 1956; *Cinara hirta* Hottes & Essig 1953; *Cinara kiusa* Hottes 1957; *Cinara occidentalis* (Davidson) 1909; *Lachnus osborni* Knowlton 1942; *Cinara radicivora* Voegtlin 1982; *Cinara*

*schuhi* Hottes 1957; *Cinara*

*sonata* Hottes 1955; *Cinara*

*zoarcbursara* Knowlton 1935; *Cinara*

*Abies grandis* (Dougl. ex D. Don) Lindl.

*abieticola* (Cholodkovsky) 1899; *Lachnus confinis* (Koch) 1856; *Lachnus curvipes* (Patch) 1912; *Lachnus gentneri* Hottes 1957; *Cinara occidentalis* (Davidson) 1909; *Lachnus pacifica* (Wilson) 1919; *Lachniella sonata* Hottes 1955; *Cinara*

*Abies lasiocarpa* (Hook.) Nutt

*abieticola* (Cholodkovsky) 1899; *Lachnus chinookiana* Hottes 1955; *Cinara confinis* (Koch) 1856; *Lachnus curvipes* (Patch) 1912; *Lachnus lasiocarpae* (Gillette & Palmer) 1930; *Lachnus minuta* Hottes & Knowlton 1954; *Cinara occidentalis* (Davidson) 1909; *Lachnus osborni* Knowlton 1942; *Cinara utahensis* Knowlton & Smith 1938; *Cinara*

*Abies magnifica* A. Murr.

*curvipes* (Patch) 1912; *Lachnus setulosa* Hottes & Essig 1955; *Cinara*

*Abies religiosa* (HBK) Schlechtend & Cham.

*curvipes* (Patch) 1912; *Lachnus*

*Abies sibiricae* Ledeb.

*occidentalis* (Davidson) 1909; *Lachnus*

*Abies* sp.

*engelmanniensis* (Gillette & Palmer) 1925; *Lachnus*

*Cedrus deodara* Loud.

*curvipes* (Patch) 1912; *Lachnus*

*Cedrus* sp.

*abieticola* (Cholodkovsky) 1899; *Lachnus*

*Larix laricina* (Du Roi) K. Koch

*laricifex* (Fitch) 1858; *Lachnus laricis* (Hartig) 1839; *Lachnus lyallii* Bradley 1956; *Cinara palmerae* (Gillette) 1917; *Lachnus spiculosa* Bradley 1956; *Cinara subterranea* Bradley 1956; *Cinara*



*Larix lyallii* Parl.*lyallii* Bradley 1956; *Cinara**Larix occidentalis* Nutt.*laricifoliae* (Wilson) 1915; *Lachnus**Picea abies* (L.) Karst.*braggii* (Gillette) 1917; *Lachnus costata* (Zetterstedt) 1828; *Aphis fornacula* Hottes 1930; *Cinara palmerae* (Gillette) 1917; *Lachnus piceicola* (Cholodkovsky) 1896; *Lachnus pilicornis* (Hartig) 1841; *Aphis**Picea engelmannii* Parry ex Engelm.*braggii* (Gillette) 1917; *Lachnus caliginosa* Hottes 1961; *Cinara coloradensis* (Gillette) 1917; *Lachnus curvipes* (Patch) 1912; *Lachnus engelmanniensis* (Gillette & Palmer) 1925; *Lachnus fornacula* Hottes 1930; *Cinara glehna* (Essig) 1915; *Lachnus hottesi* (Gillette & Palmer) 1924; *Lachnus nimbata* Hottes 1954; *Cinara obscura* Bradley 1953; *Cinara palmerae* (Gillette) 1917; *Lachnus pruinosa* (Hartig) 1841; *Lachnus saskensis* Bradley 1962; *Cinara vandykei* (Wilson) 1919; *Lachniella**Picea glauca* (Moench) Voss*acadiana* Hottes 1956; *Cinara atripes* Hottes 1958; *Cinara bonita* Hottes 1956; *Cinara braggii* (Gillette) 1917; *Lachnus coloradensis* (Gillette) 1917; *Lachnus costata* (Zetterstedt) 1828; *Aphis curvipes* (Patch) 1912; *Lachnus fornacula* Hottes 1930; *Cinara hottesi* (Gillette & Palmer) 1924; *Lachnus jucunda* Hottes 1958; *Cinara nigripes* Bradley 1962; *Cinara obscura* Bradley 1953; *Cinara pallidipes* Hottes 1958; *Cinara palmerae* (Gillette) 1917; *Lachnus piceicola* (Cholodkovsky) 1896; *Lachnus pilicornis* (Hartig) 1841; *Aphis pinicola* (Kaltenbach) 1843; *Lachnus saskensis* Bradley 1962; *Cinara thatcheri* Knowlton & Smith 1938; *Cinara**vandykei* (Wilson) 1919; *Lachniella**yukona* Hottes 1964; *Cinara**Picea glehnii* (Friedr. Schmidt) M.T. Mast*glehna* (Essig) 1915; *Lachnus**Picea mariana* (Mill.) B.S.P.*abietis* (Fitch) 1851; *Lachnus braggii* (Gillette) 1917; *Lachnus fornacula* Hottes 1930; *Cinara hottesi* (Gillette & Palmer) 1924; *Lachnus mariana* Bradley 1956; *Cinara nigripes* Bradley 1962; *Cinara palmerae* (Gillette) 1917; *Lachnus rara* Bradley 1956; *Cinara**Picea pungens* Engelm.*braggii* (Gillette) 1917; *Lachnus caliginosa* Hottes 1961; *Cinara coloradensis* (Gillette) 1917; *Lachnus costata* (Zetterstedt) 1828; *Aphis fornacula* Hottes 1930; *Cinara glehna* (Essig) 1915; *Lachnus palmerae* (Gillette) 1917; *Lachnus pilicornis* (Hartig) 1841; *Aphis pruinosa* (Hartig) 1841; *Lachnus wanepae* Hottes 1933; *Cinara**Picea rubens* Sarg.*braggii* (Gillette) 1917; *Lachnus fornacula* Hottes 1930; *Cinara nepticula* Hottes 1958; *Cinara pinicola* (Kaltenbach) 1843; *Lachnus**Picea sitchensis* (Bong.) Carr.*braggii* (Gillette) 1917; *Lachnus coloradensis* (Gillette) 1917; *Lachnus costata* (Zetterstedt) 1828; *Aphis fornacula* Hottes 1930; *Cinara glacialis* Hottes 1964; *Cinara nigripes* Bradley 1962; *Cinara sitchensis* Hottes 1958; *Cinara vandykei* (Wilson) 1919; *Lachniella**Picea* sp.*abieticola* (Cholodkovsky) 1899; *Lachnus alaskana* Hottes 1964; *Cinara bonica* Hottes 1956; *Cinara caudelli* (Wilson) 1919; *Lachniella soplada* Hottes 1956; *Cinara vanduzei* (Swain) 1919; *Lachnus*

*Pinus albicaulis* Engelm.

*anzai* Hottes & Essig 1953; *Cinara ferrisi* (Swain) 1918; *Lachnus inscripta* Hottes & Essig 1953; *Cinara murrayanae* (Gillette & Palmer) 1924; *Lachnus oregoni* Hottes & Essig 1953; *Cinara*

*Pinus attenuata* Lemm.

*essigi* Hottes 1961; *Cinara*

*Pinus banksiana* Lamb.

*apini* (Gillette & Palmer) 1924; *Lachnus banksiana* Pepper & Tissot 1955; *Cinara brevispinosa* (Gillette & Palmer) 1924; *Lachnus canatra* Hottes & Bradley 1953; *Cinara cronartii* Tissot & Pepper 1967; *Cinara gracilis* (Wilson) 1919; *Lachniella kocheta* Hottes 1958; *Cinara longispinosa* Tissot 1932; *Cinara nigra* (Wilson) 1919; *Lachniella ontarioensis* Bradley 1962; *Cinara pergandei* (Wilson) 1919; *Lachniella pinea* (Mordvilko) 1895; *Lachnus piniradicis* Bradley 1959; *Cinara pinivora* (Wilson) 1919; *Lachniella russellae* Pepper & Tissot 1973; *Cinara strobili* (Fitch) 1851; *Eriosoma watsoni* Tissot 1939; *Cinara*

*Pinus canariensis* C. Smith

*ponderosae* (Williams) 1910; *Lachnus*

*Pinus cembroides* Zucc.

*terminalis* (Gillette & Palmer) 1924; *Lachnus wahtolca* Hottes 1953; *Cinara*

*Pinus clausa* (Chapm. ex Engelm.) Vasey ex Sarg.

*atlantica* (Wilson) 1919; *Lachniella carolina* Tissot 1932; *Cinara cronartii* Tissot & Pepper 1967; *Cinara pergandei* (Wilson) 1919; *Lachniella pinivora* (Wilson) 1919; *Lachniella taedae* Tissot 1932; *Cinara watsoni* Tissot 1939; *Cinara*

*Pinus contorta* Dougl. ex Loud.

*brevispinosa* (Gillette & Palmer) 1924; *Lachnus*

*contortae* Hottes 1958; *Cinara medispinosa* (Gillette & Palmer) 1929; *Lachnus murrayanae* (Gillette & Palmer) 1924; *Lachnus parvicornis* Hottes 1958; *Cinara sclerosa* Richards 1956; *Cinara similis* (Gillette & Palmer) 1924; *Lachnus*

*Pinus contorta* var. *latifolia* Engelm.

*brevispinosa* (Gillette & Pamer) 1924; *Lachnus canatra* Hottes & Bradley 1953; *Cinara medispinosa* (Gillette & Palmer) 1929; *Lachnus murrayanae* (Gillette & Palmer) 1924; *Lachnus oregonensis* (Wilson) 1915; *Lachnus pergandei* (Wilson) 1919; *Lachniella*

*Pinus contorta* var. *murrayana* Grev. & Balf.

*brevispinosa* (Gillette & Palmer) 1924; *Lachnus medispinosa* (Gillette & Palmer) 1929; *Lachnus oregonensis* (Wilson) 1915; *Lachnus*

*Pinus cooperi* C. E. Blanco

*schwarzii* (Wilson) 1919; *Lachniella*

*Pinus coulteri* D. Don

*arizonica* (Wilson) 1919; *Lachniella diabolica* Hottes 1961; *Cinara fresai* Blanchard 1939; *Cinara montanensis* Hottes 1961; *Cinara tujafilina* (Del Guercio) 1909; *Lachniella*

*Pinus densiflora* Siebold & Zucc.

*pergandei* (Wilson) 1919; *Lachniella*

*Pinus douglasiana* Martínez

*californica* Hottes & Essig 1953; *Cinara ponderosae* (Williams) 1910; *Lachnus*

*Pinus durangensis* Roezl.

*californica* Hottes & Essig 1953; *Cinara*

*Pinus echinata* Mill.

*atlantica* (Wilson) 1919; *Lachniella carolina* Tissot 1932; *Cinara pergandei* (Wilson) 1919; *Lachniella watsoni* Tissot 1939; *Cinara*

*Pinus edulis* Engelm.

*apachea* Hottes & Butler 1955; *Cinara* *ater* (Gillette & Palmer) 1924; *Lachnus* *atra* (Gillette & Palmer) 1924; *Lachnus* *caliente* Hottes 1955; *Cinara* *curtiwahtolca* Hottes 1955; *Cinara* *edulis* (Wilson) 1919; *Lachniella* *metalica* Hottes 1956; *Cinara* *nitidula* Hottes 1954; *Cinara* *pinata* Hottes 1955; *Cinara* *piñona* Hottes 1953; *Cinara* *poketa* Hottes 1956; *Cinara* *puerca* Hottes 1954; *Cinara* *rustica* Hottes 1956; *Cinara* *tanneri* (Knowlton) 1930; *Lachnus* *terminalis* (Gillette & Palmer) 1924;

*Lachnus*

*wahtolca* Hottes 1953; *Cinara*

*Pinus elliottii* Engelm.

*atlantica* (Wilson) 1919; *Lachniella* *cronartii* Tissot & Pepper 1967; *Cinara* *melaina* Boudreaux 1948; *Cinara* *newelli* Tissot 1939; *Cinara* *pinivora* (Wilson) 1919; *Lachniella* *taedae* Tissot 1932; *Cinara* *watsoni* Tissot 1939; *Cinara*

*Pinus flexilis* James

*apini* (Gillette & Palmer) 1924; *Lachnus* *curtivillosa* Hottes 1955; *Cinara* *flexilis* (Gillette and Palmer) 1924; *Lachnus* *parvavillosa* Hottes 1955; *Cinara* *villosa* (Gillette & Palmer) 1931; *Lachnus*

*Pinus glabra* Walt.

*arizonica* (Wilson) 1919; *Lachniella* *atlantica* (Wilson) 1919; *Lachniella* *californica* Hottes & Essig 1953; *Cinara* *carolina* Tissot 1932; *Cinara* *longispinosa* Tissot 1932; *Cinara* *melaina* Boudreaux 1948; *Cinara* *pergandei* (Wilson) 1919; *Lachniella* *taedae* Tissot 1932; *Cinara* *watsoni* Tissot 1939; *Cinara*

*Pinus greggii* Engelm.

*ponderosae* (Williams) 1910; *Lachnus*

*Pinus jeffreyi* Grev. & Balf.

*arizonica* (Wilson) 1919; *Lachniella* *onatei* Hottes & Essig 1953; *Cinara* *ponderosae* (Williams) 1910; *Lachnus* *schwarzii* (Wilson) 1919; *Lachniella*

*Pinus lambertiana* Dougl.

*hirticula* Hottes 1958; *Cinara* *moketa* Hottes 1957; *Cinara* *saccharinipini* Hottes 1958; *Cinara*

*Pinus leiophylla* Schiede & Deppe

*terminalis* (Gillette & Palmer) 1924; *Lachnus*

*Pinus lumholzii* Robinson & Fernald

*californica* Hottes & Essig 1953; *Cinara*

*Pinus michoacana* Martínez

*ponderosae* (Williams) 1910; *Lachnus* *terminalis* (Gillette & Palmer) 1924; *Lachnus*

*Pinus monophylla* Torr. & Frem.

*atra* (Gillette & Palmer) 1924; *Lachnus* *curtiwahtolca* Hottes 1955; *Cinara* *edulis* (Wilson) 1919; *Lachniella* *tanneri* (Knowlton) 1930; *Lachnus* *wahtolca* Hottes 1953; *Cinara*

*Pinus monticola* Dougl. ex D. Don

*chamberlini* Knowlton 1935; *Cinara* *ferrisi* (Swain) 1918; *Lachnus* *hirsuta* Hottes & Essig 1954; *Cinara* *kucea* Hottes 1958; *Cinara*

*Pinus mugo* Turra

*pergandei* (Wilson) 1919; *Lachniella*

*Pinus nigra* Arnold

*californica* Hottes & Essig 1953; *Cinara* *montanensis* (Wilson) 1919; *Lachniella* *pinex* (Mordvilko) 1895; *Lachnus* *pini* (Linnaeus) 1758; *Aphis* *ponderosae* (Williams) 1910; *Lachnus*

*Pinus occidentalis* Sw.

*arizonica* (Wilson) 1919; *Lachniella* *californica* Hottes & Essig 1953; *Cinara* *ponderosae* (Williams) 1910; *Lachnus*

- Pinus oocarpa* Schiede  
*azteca* Hottes & Essig 1954; *Cinara californica* Hottes & Essig 1953; *Cinara*
- Pinus palustris* Mill.  
*carolina* Tissot 1932; *Cinara melaina* Boudreaux 1948; *Cinara osborni* Tissot 1944; *Cinara*
- Pinus patula* Schlechtend. & Cham.  
*californica* Hottes & Essig 1953; *Cinara terminalis* (Gillette & Palmer) 1924; *Lachnus*
- Pinus ponderosa* Dougl. ex Laws.  
*americana* Hottes & Essig 1953; *Cinara arizonica* (Wilson) 1919; *Lachniella glabra* (Gillette & Palmer) 1924; *Lachnus kinei* Hottes & Essig 1953; *Cinara lassenensis* Hottes & Essig 1953; *Cinara nigrita* Hottes & Essig 1953; *Cinara oregonensis* (Wilson) 1915; *Lachnus ponderosae* (Williams) 1910; *Lachnus pseudoschwarzii* Palmer 1936; *Cinara schwarzii* (Wilson) 1919; *Lachniella serrai* Hottes & Essig 1953; *Cinara solitaria* (Gillette & Palmer) 1924; *Lachnus thatcheri* Knowlton & Smith 1938; *Cinara*
- Pinus ponderosa* var. *scopulorum* Engelm.  
*glabra* (Gillette & Palmer) 1924; *Lachnus ponderosae* (Williams) 1910; *Lachnus schwarzii* (Wilson) 1919; *Lachniella solitaria* (Gillette & Palmer) 1924; *Lachnus*
- Pinus pseudostrobus* Lindl.  
*terminalis* (Gillette & Palmer) 1924; *Lachnus*
- Pinus pungens* Lamb.  
*atlantica* (Wilson) 1919; *Lachniella pinivora* (Wilson) 1919; *Lachniella taedae* Tissot 1932; *Cinara watsoni* Tissot 1939; *Cinara*
- Pinus quadrifolia* Parl. ex Sudw.  
*ponderosae* (Williams) 1910; *Lachnus*
- Pinus resinosa* Ait.  
*atlantica* (Wilson) 1919; *Lachniella carolina* Tissot 1932; *Cinara*
- harmonia* Hottes 1958; *Cinara pinea* (Mordvilko) 1895; *Lachnus pinivora* (Wilson) 1919; *Lachniella strobi* (Fitch) 1851; *Eriosoma watsoni* Tissot 1939; *Cinara*
- Pinus rigida* Mill.  
*atlantica* (Wilson) 1919; *Lachniella carolina* Tissot 1932; *Cinara longispinosa* Tissot 1932; *Cinara pergandei* (Wilson) 1919; *Lachniella pinea* (Mordvilko) 1895; *Lachnus pinivora* (Wilson) 1919; *Lachniella rigidae* Hottes 1958; *Cinara taedae* Tissot 1932; *Cinara watsoni* Tissot 1939; *Cinara*
- Pinus roxburghii* Sarg.  
*californica* Hottes & Essig 1953; *Cinara*
- Pinus sabiniana* Dougl.  
*arizonica* (Wilson) 1919; *Lachniella sabinianus* (Swain) 1919; *Lachnus*
- Pinus serotina* Michx.  
*atlantica* (Wilson) 1919; *Lachniella cronartii* Tissot & Pepper 1967; *Cinara taedae* Tissot 1932; *Cinara watsoni* Tissot 1939; *Cinara*
- Pinus* sp.  
*brevipilosa* Voegtlin, Remaudière, Peña 1986; *Cinara*  
*enigma* Hottes & Knowlton 1954; *Cinara nigra* (Wilson) 1919; *Lachniella vagabunda* Hottes & Essig 1953; *Cinara*
- Pinus strobus* L.  
*atlantica* (Wilson) 1919; *Lachniella pinea* (Mordvilko) 1895; *Lachnus strobi* (Fitch) 1851; *Eriosoma*
- Pinus sylvestris* L.  
*atlantica* (Wilson) 1919; *Lachniella pinea* (Mordvilko) 1895; *Lachnus pini* (Linnaeus) 1758; *Aphis pinivora* (Wilson) 1919; *Lachniella watsoni* Tissot 1939; *Cinara*
- Pinus tabulaeformis* Carr.  
*californica* Hottes & Essig 1953; *Cinara*



*Pinus taeda* L.

*atlantica* (Wilson) 1919; *Lachniella carolina* Tissot 1932; *Cinara cronartii* Tissot & Pepper 1967; *Cinara gracilis* (Wilson) 1919; *Lachniella longispinosa* Tissot 1932; *Cinara melaina* Boudreaux 1948; *Cinara newelli* Tissot 1939; *Cinara osborni* Tissot 1944; *Cinara pergandei* (Wilson) 1919; *Lachniella pinea* (Mordvilko) 1895; *Lachnus pini* (Linnaeus) 1758; *Aphis pinivora* (Wilson) 1919; *Lachniella taedae* Tissot 1932; *Cinara watsoni* Tissot 1939; *Cinara westi* Tissot & Pepper 1967; *Cinara*

*Pinus virginiana* Mill.

*atlantica* (Wilson) 1919; *Lachniella carolina* Tissot 1932; *Cinara gracilis* (Wilson) 1919; *Lachniella inoptis* (Wilson) 1919; *Lachniella longispinosa* Tissot 1932; *Cinara lunata* Hottes 1961; *Cinara pergandei* (Wilson) 1919; *Lachniella pinea* (Mordvilko) 1895; *Lachnus pinivora* (Wilson) 1919; *Lachniella schwarzii* (Wilson) 1919; *Lachniella taedae* Tissot 1932; *Cinara tunicula* Hottes 1958; *Cinara watsoni* Tissot 1939; *Cinara*

*Pinus wallichiana* A.B. Jack

*arizonica* (Wilson) 1919; *Lachniella*

*Pseudotsuga menziesii* (Mirb.) Franco

*commatula* Hottes & Essig 1954; *Cinara dubia* Hottes & Essig 1954; *Cinara osborni* Knowlton 1942; *Cinara pseudotaxifoliae* Palmer 1952; *Cinara pseudotsugae* (Wilson) 1912; *Lachnus splendens* (Gillette & Palmer) 1924; *Lachnus taxifoliae* (Swain) 1918; *Lachnus vagabunda* Hottes & Essig 1953; *Cinara*

*Pseudotsuga menziesii* var. *glauca* (Beissn.)

## Franco

*pseudotaxifoliae* Palmer 1952; *Cinara pseudotsugae* (Wilson) 1912; *Lachnus*

*Tsuga heterophylla* (Raf.) Sarg.

*pilicornis* (Hartig) 1841; *Aphis tsugae* Bradley 1960; *Cinara*

*Tsuga mertensiana* (Bong.) Carr.

*wahsugae* Hottes 1960; *Cinara*

Family **Taxodiaceae***Cryptomeria japonica* D. Don

*maui* Bradley 1965; *Cupressobium pilicornis* (Hartig) 1841; *Aphis*

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